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CONTENTS AND SUBJECT INDEX

Individual Versus Group Responsibility for Care of the Hospital Patient. Henry A. Christian, M.D., Boston. 993

Individual Versus Group Responsibility for Care of the Hospital Patient. Hugh Auchincloss, M.D., New York. 995

The Purpose of an Internship. E. E. Irons, M.D., Chicago. 996

Immunization Against Diphtheria with Toxin Detoxified with Sodium Ricinoleate. W. P. Larson, M.D., and Howard Eder, M.D., Minneapolis. 998

Immunization Against Scarlet Fever with Toxin Detoxified with Sodium Ricinoleate. W. P. Larson, M.D.; E. J. Huenekens, M.D., Minneapolis, and Woodard Colby, M.D., St. Paul. 1000

A Benign and Curable Form of Hemorrhagic Nephritis. George Baehr, M.D., New York. 1001

CLINICAL NOTES, SUGGESTIONS AND NEW INSTRUMENTS

Sporadic Trichinosis with Extreme Hypotension. Garnett Cheney, M.D., San Francisco. 1004

Uterine Screen and Introducer of Radon Tubes. F. E. Simpson, M.D., and R. E. Flesher, M.D., Chicago. 1005

SPECIAL ARTICLES

Diphtheria Mortality in Large Cities of the United States in 1925. 1003

The Technic of Medication: Fourteenth Article. Bernard Fantus, M.D., Chicago. 1007

EDITORIALS

Hospital Service in United States. 1073

Hospitals Maintained by National, State and Local Governments. 1074

Vital Capacity and Prognosis. 1074

Iron and Blood Regeneration. 1075

CURRENT COMMENT

Clinical Laboratory Statistics. 1076

Manifestations of Fat Embolism. 1076

Diphtheria in 1925. 1077

ASSOCIATION NEWS 1077

HOSPITAL SERVICE IN THE UNITED STATES

Fifth Presentation of Hospital Data by the Council on Medical Education and Hospitals of the American Medical Association. 1009

Bed Capacity of General Hospitals and Daily Average in Constant Use During Preceding Year. 1015

Hospitals Approved for Internships. 1056

Hospitals Providing Approved Residencies and Courses in Certain Specialties. 1063

A Practical Plan for Checking and Recording the Work of Interns. 1064

Report on Clinical Laboratory Service in the United States. 1065

Essentials of an Approved Clinical Laboratory. 1068

Provisional List of Clinical Laboratories. 1070

(Subject Index on next page)

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SUBJECT INDEX TO THIS ISSUE

The letters used to explain in which department the matter indexed appears are as follows: The Star (*) indicates an Original Article; "ab," abstract; "E," Editorial; "C," Correspondence; "T," Therapeutics; "MI," Medicolegal; "P," Propaganda for Reform; "ME" Medical Economics.

A. M. A., Annual Congress on Medical Education, etc. 1077
Council on Medical Education and Hospitals, hospitals approved for internships *1056
Council on Medical Education and Hospitals, hospital service in U. S..*1009, E-1073
Dallas Session news....1078
report on clinical laboratory service in United States *1065, E-1076
Abortion, moral aspects ab-1104
syphilis and ab-1104
Accident, damages, fear of miscarriage..MI-1095
damages, medical fees, when a part of..MI-1095
Acusector, advantages of....ab-1096
Albuminuria from renal vasoconstriction.ab-1096
Alkali reserve, variations ab-1100
alkaline fluid effect on hemorrhage...ab-1103
Alopecia, prescription for....1092
Anemia, treatment, cholesterol ab-1103
pernicious, of aplastic type....ab-1099
treatment, iron E-1075
Anesthesia, Gwathmey's, in obstetrics...ab-1104
Angina pectoris, surgical treatment....ab-1098
Antimony tartrate injections, action of..ab-1099
Ape, antiquty of....1084
Archives de los Hospitales....1085
Army, U. S., influenza in....1083
Association News....1077
Arthritis with parkinsonian tremor....ab-1100
chronic, and diabetes mellitus....C-1090
Bacteriophage, inactivation ab-1097
Basal Ganglion, calcification....ab-1099
Benzyl alcohol, pharmacology....ab-1097
Bile Ducts, intrahepatic, rupture....ab-1096
pain, pathogenesis ab-1101
Biologic products, control of....1085
Birth Control, moral aspects ab-1104
Bladder, hairpin in ab-1102
Blood after roentgen rays and tuberculosis ab-1101
cells vs. pneumococcus extract....ab-1097
pressure, high, from sodium citrate...ab-1100
pressure; hypertonia or essential hypertension 1086
pressure, low, in sporadic trichinosis....*1004
pressure vs. dry cupping....1085
regeneration and iron....E-1075
sugar levels, glycolysis at....ab-1097
vessel anastomosis, stitch interpolation in ab-1096
volume with splenomegaly ab-1103
Book Notices....1093
Books Received....1094
Bread, selling regulations....1086
Breast, mastitis, antihemotherapy....ab-1104
surgery, conductor in....ab-1096
Brown, Sir Robert Charles, bequest of his body 1084
Cancer, Roffo neutral red test for....ab-1102
Cerebrospinal Fluid sugar, diagnostic value ab-1097
Children, outings for....1086
Chordoma, sacrococcygeal....ab-1098
Christian Science treatment, death from diphtheria under 1084
Colostrum secretion ab-1104
Correspondence....1090
Cupping, dry, effects of....1085
Dawson, Lord Dawson on osteopaths in England 1083
Deaths....1088
Dental Congress 1085
Dental aid for the poor....1086
Diabetes, mellitus and chronic arthritis...C-1090
Diarrhea in breast-fed infants....ab-1101
Diphtheria, immunization against *998
death from, under Christian Science treatment 1084
in 1925 ....E-1077
mortality in large cites of U. S. in 1925.*1005
toxin-antitoxin vs. vaccination....1092
toxin detoxified with sodium ricinoleate..*998
toxin, goat serum for....1092
Duodenum, roentgen study, by oral technic ab-1100
Egg, duck, food poisoning from....1084
Embolism, fat, some manifestations of...E-1076
Encephalitis, epidemic of special form....ab-1100
Endocarditis, experimental ab-1098
Eosinophilia, diagnostic value....ab-1100
Epilepsy, cardiac ab-1102
Epinephrine and pregnancy....ab-1104
Evolution, antiquity of ape....1084
Fallopian Tubes, nodes and cysts on....ab-1104
Fatigue, effect on infection....ab-1099
Fees, liability in personal injury case...MI-1095
Fever, protracted, from syphilis....ab-1102
Food poisoning from duck egg....1084
Foreign Letters....1083
Fractures, healing, vs. avitaminosis....ab-1103
subperiosteal ab-1104
Fright, fear of miscarriage not compensable MI-1095
Gallbladder, calculi, treatment....ab-1096
contraction ab-1100
roentgen study, by oral technic....ab-1100
Gangrene, threatened, treatment....ab-1098
Gonococcus, antigonococcal vaccine....1091
Gout, thorium treatment....ab-1101
Government Services....1083
Hand, congenital clubhand....ab-1098
Hematuria *1001
Heredity, problems of....1085
Hernia and industrial accidents....ab-1102
inguinal, multiple sacs in....ab-1096
Herniotomy vs. iliohypogastric nerve....ab-1096
Hospitals approved for internships....*1056
annual congress on....1077
for community use....*1011
general, bed capacity *1015
individual vs. group responsibility for patient *993, *995
maintained by national, state and local governments E-1074
providing approved residencies and courses in specialties *1063
service in United States....*1009, E-1073
superintendents *1013
Industrial accidents and hernia....ab-1102
disease among miners of Ruhr region....1087
Infants, new-born, resuscitated by epinephrine ab-1101
feeding 1091
Infection, focal, vs. hematuria....*1001
effect of fatigue ab-1099
Influenza in Army....1083
Insurance, life, sound health defined....MI-1095
societies run by physicians....1085
Interns, practical plan for checking and recording work of *1064
supply of, by states *1013
Internship, purpose of *996
hospitals providing approved residencies and courses in certain specialties....*1063
Intestine, perforation of syphilitic ulcers in ab-1104
projecting, skin flap cover for....ab-1096
Iron and blood regeneration....E-1075
Israel, J., death of....1087
Kahn Test antigen, stability....ab-1098
Keratitis, avoidable ab-1102
Kidney, vasoconstriction, causes albuminuria ab-1096
Laboratory, clinical, essentials of....*1068
clinical, provisional list of *1070
clinical, service in U. S....*1065
clinical statistics E-1076
Leukocytes, count, vs. lymph gland extract ab-1099
count vs. dry cupping....1085
nuclei in syphilis ab-1103
Licensure vs. new commission on medical education ab-1078
Life expectancy of physicians....1087
Lymph Gland extract, mesenteric, vs. leukocytes ab-1099
Marriages....1088
Medical Education, annual congress on....1077
new commission on....ab-1078
Medical Education, Registration....1092
Medical Practice Act, Wisconsin....ab-1077
Medication, technic of *1007
Medicine, group practice *993, *995
Medicolegal....1095
Meetings, Coming Meetings....1095
Mental abilities of rats....ab-1104
Mercury, salivation after....1090
Metabolism, basal, studies ab-1098
Methylene azur stain for nerve cells....ab-1098
Milk, tuberculous, vs pasteurization....ab-1099
dried or condensed, in infant feeding....1091
selling regulations in Netherlands....1086
Miners, tuberculosis mortality, of Ruhr region 1087
Nephritis, hemorrhagic *1001
Nerve, iliohypogastric, vs. herniotomy....ab-1096
Neuroses, traumatic ab-1103
Neutral red serologic test....ab-1102
News....1079
Nipples, fissured, ultraviolet rays for...ab-1101
Omentum, movements of ab-1099
Osteitis, fibrous, parathyroid tumor with.ab-1104
Osteopaths, Lord Dawson on....1083
Oxyhemoglobin, peroxidase function of..ab-1104
Pancreas, accessory 1091
Paralysis, agitans, with Parkinsonian tremor ab-1100
Parathyroid tumor with fibrous osteitis..ab-1104
Peroxidase function of oxyhemoglobin..ab-1104
Physical Examination, periodic....1086
Physicians having hospital connection....*1012
insurance societies run by....1085
life expectancy of....1087
of railway companies, Netherlands....1086
Pills, technic of medication....*1007
Pneumococcus extract, effect on blood cells ab-1097
extracts produce purpura....ab-1097
Pregnancy and epinephrine ab-1104
Prognosis and vital capacity....E-1074
Propaganda for Reform....1089
Prostate, size, estimating ab-1098
Protein therapy, technic....1091
Psoriasis, nonspecific protein in....1091
Purpura from pneumococcus extracts...ab-1097
Pylorus tumors 1091
Queries and Minor Notes....1090
Radon tubes, inserting into uterus....*1005
Railroad physicians 1086
Rawson Hospital, enlargement of....1085
Rheumatism, acute articular, streptococci in ab-1096
Sacrococcygeal Region, chordoma....ab-1098
Saliva, excessive, after mercury....1090
Salt, hypertension-inducing action of...ab-1100
Scarlet Fever, immunization *1000
toxin detoxified with sodium ricinoleate..*1000
Serum, goat 1092
Smallpox vaccination and diphtheria toxin-antitoxin 1092
Snake venoms, Indian antidotes for....ab-1101
Soap toxins in diphtheria....*998
toxins in scarlet fever *1000
Society Proceedings....1081, 1095
Sodium ricinoleate for detoxifying toxin *998, *1000
Specialties, hospitals providing courses...*1063
Spinal Canal, danger of lipiodol injections into ab-1096
Splenomegaly, blood volume with....ab-1103
Stain, Giemsa, substitute for....ab-1097
methylene azur, for nerve cells....ab-1098
State Board Examinations....1092
State Board of examiners in basic sciences ab-1077
Stomach function test ab-1103
Stomatitis, mercurial 1090
Streptococci in rheumatic fever....ab-1096
Surgery, plastic, for projecting intestine..ab-1096
Sympathectomy, periarterial ab-1101
Syphilis vs. abortion ab-1104
nuclei of leukocytes in....ab-1104
Tabes Dorsalis, vomiting crises....ab-1102
Tetanus, vaccination, anatoxin for....ab-1099
Therapeutics, principles ab-1101
Thorium treatment of gout....ab-1101
Thymus, excision, experimental....ab-1097
Thyroid, disease, vegetative system in..ab-1100
Toluidin blue stain for nerve cells....ab-1098
Tonics and Sedatives....Adv. page 38
Trichinosis, sporadic, with extreme hypotension *1004
Tuberculin; nonprotein gum from tubercle bacilli ab-1096
Tuberculosis, immunity, mechanism....ab-1104
antituberculosis film 1068
institute, Buenos Aires....1085
mortality among miners....1087
lipiodol injury in ab-1104
treatment, Sanocrysin ab-1103
Urethra, perineal, rupture of....ab-1102
prostatic, disease ab-1102
Uterus, cancer, radon treatment....*1005
Vital capacity and prognosis....E-1074
Vitamin, avitaminosis, experimental....ab-1104
avitaminosis and fracture healing....ab-1103
Water metabolism ab-1103
Whooping Cough, vaccination against....1086
Yeast, roentgen rays effect on....ab-1103
Zoalite lamp 1091

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INDIVIDUAL VERSUS GROUP RESPONSIBILITY FOR THE CARE OF THE HOSPITAL PATIENT *

HENRY A. CHRISTIAN, M.D.
BOSTON

Changing conditions and methods of medical work may necessitate readjustments of the relationship that exists between the physician or surgeon and his patient. Group methods have entered medical practice. Complexity in the technic used in diagnosis and treatment has been one of the causes of the development of these group methods. It is hardly possible for the single individual any longer to do with his own hands all the things needed for the diagnosis and treatment of the individual patient with anything other than a very simple malady, and it is increasingly difficult for him to possess the desirable range of knowledge of medicine to handle alone complicated cases. This is recognized in all varieties of practice by the calling in of consultants, by the utilization of such special methods of diagnosis as the roentgen ray, the determination of a Wassermann reaction and many others, of which these two may serve merely as examples, and by the employment of such special therapeutic methods as the intraspinal injection of serum, transfusion of blood, applications of special forms of heat and radiant energy, and the surgical removal of diseased organs and neoplasms, these few being cited as examples of what might be multiplied almost indefinitely. All of this involves work on the patient by more than one individual and so constitutes group practice. The one constant factor in all these changing conditions is the patient and his need for help. On the one hand, in most instances, there is the group in some form, and, on the other, the patient.

How are these two factors in medical work, the group and the patient, going to be brought together in the most advantageous way? It is perfectly evident that the patient needs to receive advice and direction based on the work of the group, if he is handled by a group. There has to be a responsibility somewhere for getting understood by the patient what he should do in order to improve his physical condition, or, this being impossible, how best to adapt himself to his disability in order to minimize its effect and retard its progression. This very largely resolves itself into some individual of the group assuming a responsible advisory relationship to the patient, for it seems, to say the least, a waste of energy for the group as a whole to assume this responsibility, even were it a feasible arrangement. The more personal and intimate this individual contact becomes, the greater the benefit that the patient is to receive, for it is quite impossible to divorce the influence of the personality of the physician on the personality of the patient from the practice of medicine. If it is done, the therapeutic measures advised for the patient at once lose in their potency. What has been said above applies equally to the patient in and out of the hospital. In the hospital and the diagnostic clinic, group work is apt to be more highly organized than elsewhere; often the reason for the patient's going to a hospital or a clinic is to obtain the benefit of examination by a group. This is particularly true of the hospital or clinic that is operated in large measure as a diagnostic clinic. Here it is that the lack of an individual responsibility to the patient is most apt to be found, whether the problem concerns diagnosis or treatment.

Judging by the expressions of opinion that I have heard from patients about the group method of practice, its greatest defect lies in the feeling of the patient that he has missed a personal interest in himself, and that he suspects that he has not quite understood the results of his examination and has but vague ideas of what it is intended that he should do, largely because no single individual of the group has spent sufficient time considering him and talking to him as a whole organism needing new adjustments. As I myself have subsequently seen patients who have gone to a group for diagnosis, these misgivings of the patient often seem justified. The mistakes that are made appear to have originated usually because the most matured clinician of the group has failed to observe sufficiently long and sufficiently frequently the patient as a human personality in relation to the various diagnostic data accumulated in the group study, and because advice to the patient is given in too hurried a way without opportunity for the patient to ask many questions which he needs to have answered.

To me, group responsibility to the patient seems well nigh an unworkable relationship; individual responsibility is necessary. How is this to be brought about for the hospital patient? It seems to me that some one member of the hospital staff has to bear a responsible interpreting and directing relationship to the patient at every stage of his progress through the hospital; it may not be essential for the same individual to act continuously in this relationship to the patient, though it seems desirable that he should. A good deal will depend on the organization of the hospital and on what has to be done to the patient.

Hospitals, as organized at present, may be divided into several groups: (*a*) hospitals with separately organized services, medical, surgical, etc.; (*b*) hospitals that are primarily for one type of patient, surgical, medical, obstetric, nose and throat, etc.; (*c*) hospitals pri-

* Read before the Annual Congress on Medical Education, Medical Licensure and Hospitals, Chicago, Feb. 18, 1926.

marily organized as a diagnostic service through which patients are selected for special forms of therapeutics.

In the hospital with separately organized services, one of two plans may be followed: Either each service is a complete organization capable of handling practically all types of patients admitted to it with an occasional request for consultative help from the other services, or it is less independently organized and the request for aid from the other services is generally a part of the management of the patient. It would seem that in either plan a responsible member of the visiting staff should hold a direct advisory relationship to every patient and assume all professional responsibility for that patient, including the responsibility for arranging for the patient to be seen in consultation by whoever can help in arriving at a satisfactory diagnosis and planning an adequate form of treatment. Of this type are the great bulk of the larger hospitals of the land, and in them, as a rule, patients receive very satisfactory care, including such advice from consultants as is needed, and are brought into a responsible relationship to some member of the staff.

The second type of hospital might be termed the special hospital. Usually it is a smaller institution. In smaller towns the hospital is apt to be of this type; particularly is it a surgical hospital. In these hospitals, patients are usually under the care of but one man, and often the hospital differs from the patient's home only in having an operating room attached to it. Probably there are more of this type of hospital than any other in the land. Here there is no question as to who is responsible; necessarily it is individual responsibility. The question is, Does the patient in this type of hospital get sufficient examination and consideration by those with special training and capability over and above what the medical or surgical man in responsible charge can give? That this has to be answered in the negative in many instances all would, I believe, agree.

The third type, the hospital organized primarily as a diagnostic clinic, is on the whole new and not numerous. To many it would seem that this type of organization is likely to be brought into the large majority of our hospitals in the future. In it the problem is largely that of determining who, of a professionally completely adequate staff, shall bear the relationship of individual responsibility to the patient and of providing opportunity and time for this relationship satisfactorily to be carried out. In this type of hospital the organization is primarily intended to provide for each patient the application of all needed diagnostic methods, and the only danger lies in accepting the form of applying many methods as necessarily involving a thorough examination of the patient, and in not integrating the data obtained into an intelligent diagnosis, prognosis and advice as to treatment. There is a danger of allowing the doing of numerous tests, some or many probably done by none too dependable technicians, to take the place of a thorough examination by an experienced clinician. It is well to remember that no multiplication of tests can be regarded as anything other than supplementary to the personal study by such an experienced clinician, and that no experienced clinician can make an adequate study of the patient in a very brief period of time. It would seem necessary, in order that such a hospital function for the best interests of the patient, to have a responsible relationship established between one of the more mature clinicians of the staff and the patient. In such a hospital the surgeon is part of the diagnostic team contributing to diagnosis what his special training fits him for. In addition, he is one of the therapists of the hospital, carrying out in a responsible way the surgical therapeutics advised for the individual patient.

From what has been said, it would seem that in the first and third types of hospitals the patient generally receives adequate service, and that this service is likely to improve under existing plans of organization. Furthermore, generally in the first type there exists a satisfactory personal responsibility to the patients and in the third type the need of such a relationship is recognized, even though it is not actually provided in every instance. The real improvement in this type of hospital must come not from rules of procedure but from securing for the staff men with better professional training. This applies to internists fully as much as to surgeons. For the latter, the ability to operate well should, in my judgment, be regarded as inadequate unless there goes with it the capability to diagnose. As has been so often said, the decision as when to operate and what operation to undertake requires fully as much skill as does the actual operation technic.

It is in the second type of hospital that inadequate service is apt to be rendered the patient; here the relationship of individual responsibility exists but the patient often lacks intelligent use of the technic of special examinations, etc.

Dr. Goldwater tells me that lately several hospitals have been asked to adopt a rule providing that no major operation is to be performed without previous consultation with an internist. I suspect that this has originated from finding that the defects in the second type of hospital, such as I have pointed out, exist and need a remedy. The query is whether the proposed remedy is likely to be effective. Of this I have grave doubts. The requirement of a consultation with an internist before a major operation seems to me illogical. If it implies an inability of the surgeon to make a diagnosis, as it apparently does, it seems to me that the remedy lies in either not allowing such a surgeon to operate at all or in organizing a diagnostic group for which that surgeon merely carries out one form of treatment; namely, surgery. I would question the desirability of the latter arrangement, which would reduce surgery to a merely mechanical form of therapeutics. Would not this type of surgeon, already judged by his hospital to be untrained or unsuited for diagnostic work, be a poor operator because lacking in those qualities of the brain needed of the surgeon fully as well as dexterity of the hand? I think so. Again, in a hospital with a surgeon of such a type one might query whether the consultation of an internist might not be merely perfunctory to fulfil the requirement or unsatisfactory because of lack of training and ability in the internist. Then, too, would it not divide responsibility in an undesirable way? It would seem that it was unfair to expect the internist to assume responsibility for the work of the surgeon, yet, in final analysis, that would seem to be what the rule might be requiring of him.

If the hospital is organized as a diagnostic group, then diagnosis will have been made by the group and treatment should be determined by some one responsible member, presumably in case of surgical treatment by the surgeon member of the diagnostic group. In the large general hospital, especially the teaching hospital, I believe the surgeon would be entirely capable of and should determine when consultation is or is not desirable, and so proceed to operate with or without it as he determined. Not possessing such capability, he cer-

tainly should not hold the position. In the smaller, special type of hospital a satisfactory solution of the problem is difficult. The solution, it seems to me, should be along the lines of preventing the work of the surgeon of doubtful ability rather than of trying to decrease the damage he may do by requiring of him a consultation with an internist before undertaking a major operation. Better surgeons and better internists are needed rather than more rules for their conduct in relation to patients.

In any type of hospital organization I am convinced that there should be an individual responsibility for the care of the patient, not a group responsibility. Numerous ways of selecting the individual for this relation to the patient could be thought of, any one of which would work with complete satisfaction, provided this responsibility is recognized by both staff member and patient and the staff member, selected for the responsibility, is a broadly trained, competent clinician. The method actually adopted needs to fit the varying circumstances of difference in organization and difference in the personality of the personnel. Rules or precedents suited to one institution might easily prove completely ineffective at another place. Consequently it would be unwise for any central body to attempt to draft rules to be applied generally. It is sufficient to insist on an actual individual responsibility to the patient in his professional care.

INDIVIDUAL VERSUS GROUP RESPONSIBILITY FOR THE CARE OF THE HOSPITAL PATIENT *

HUGH AUCHINCLOSS, M.D.
NEW YORK

Responsibility means the state of being responsible. Our dictionaries define being responsible as: (1) being answerable legally or morally for discharge of a duty, trust or debt; (2) being able to meet obligations, or (3) having a perception of the distinctions between right and wrong.

You may profitably discuss some of the myriad ways care of hospital patients demands responsibility. With your leave, I shall not. We all know they exist and that they have to be met by group or individual. Whether they can be best dealt with by the individual or by the group is our concern.

The precise meaning of our subject is susceptible of varied interpretation, according to the experiences of doctors in their several communities. My discussion must be confined to principles seemingly pertinent, gained in limited personal experience.

A hospital patient first encounters the admitting mechanism. In a sense, this is a group. If it is an emergency case, the patient is at once seen by a physician. His pedigree, civil status, and the estimation as to what sort of a case it is awaits the physician's decision. Soon, however, whether it is an emergency case or not, the pedigree is written by a lay official, a professional record of his illness is begun, and he becomes an object of concern to all, or any, branches of the hospital that may have a contribution to make on his condition. Who, then, shall determine the course of procedure; one physician, in conjunction with any other physicians he may choose to summon, or a group of physicians, who, through their various methods of approach, may be expected to overlook less with their multiple eyes than the individual, with his two?

Is it better to be taken care of by a group of specialists in the hope that the especial lesions one has will more surely come to the attention of the special physicians trained in these lesions, or is it still possible for one physician to determine in a careful history and physical examination what the troubles are and call for special help when needed?

Probably very few in this audience or anywhere would be willing to advocate a too rigid maintenance of either method. Almost surely in every hospital where so-called group responsibility may be supposed to dominate, the individual plays the major part in the individual case quite as much as the individual physician summons aid from his associates where the other scheme obtains.

As inbreeding accentuates good or bad inherent factors, so may an artificial and exclusive selection of one method or the other resemble the little girl with a curl in the middle of her forehead: when it is good, it is very, very good, but when it is bad, it's horrid. It is surely not so much the mechanism by which our patients are cared for as it is the quality of medical care with which they are surrounded.

Probably no one here but has had patients who have come from some institution where every conceivable medical analysis has been carried out without clearing a problem requiring only time, ordinary knowledge and common sense to solve. Just as true is it that institutes and groups may thrive on the errors of omission and commission of the individual.

The recognition of the essential features in a case, that is to say, the art of extracting the essence in medicine, may be done by a group or an individual, if quality is there. Is quality, then, fostered best by the group or by the individual? But is not the group made up of individuals? It certainly is; and where mass production is required, many of the great army of workers may be artists at heart. But, in general, the artist works alone.

Our hospitals, however, are not places where time hangs heavy on one's hands. The pressure is great and patients are plentiful. Work comparable to mass production must be done, though the individual physician balks at the idea that he be restricted to handling but one part in the machine. It is true that a taste and schooling in a special field influences his activities. His main attention, however, should be constantly riveted on the patient as a whole.

Perhaps the chief risk to which a so-called group system exposes itself is a failure to place responsibility on anything that is tangible. Groups melt like a mirage if things go wrong, and a patient with a wholly justifiable complaint may end up begging somebody's pardon for satisfaction.

"From pillar to post," or, in cruder vernacular, "passing the buck," has a meaning requiring no explanation. It is associated with the group plan more than when responsibility is shouldered by the individual. This shelving of responsibility is one of the worst features in hospitals. It is bad for the patient, worse for the nurse, inexcusable for the physician, and a wretched quality of medicine. "The quality of" medicine "is not strained; . . . it is twice bless'd; it blesseth him that gives and him that takes." No man, of course, should attempt medicine unless he is willing to have troubles brought to him, be bothered, and hear tales of woe, for every

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patient has one. I can scarcely believe that the same sense of responsibility can be felt by the individual physician in a group system, when a patient reaches his domain in making his medical journey, as is undertaken when a patient is assigned to some physician who, with the joint action of such associates as he may choose, undertakes to find out what is wrong with the patient and set him straight.

Theoretically, one can figure out that no great difference in assuming responsibility ought to exist between the two methods. But human nature is fallible, and the more tangible responsibility is, the more likely it will be lived up to.

To have group facilities available with an individual assigned the responsibility of the patient as a whole would seem a natural sequence to this line of thought. Indeed, it is pretty much what is being done and is likely to be done for some time to come. Our hospitals in their outpatient departments, in their varied laboratories and services and their consultants, provide group facilities. The mechanism is there. Assign the patient to a physician, let him be transferred, if need be, to another, but let him feel that some one physician is responsible for him. One cannot stop the play of forces in evolution. Our arguments pro and contra will not bring the group system nor retain individual responsibility. We may forearm, however, by forewarning of the dangers of intangible responsibility, and hurry the possession of valuable factors, such as joint thinking and action, by stressing their advantages.

Just as Drs. Sprague and Minchin are compared in Middlemarch: "In short, he had weight and might be expected to grapple with a disease and throw it; while Dr. Minchin might be better able to detect it lurking and circumvent it," our methods as physicians vary and require joint thinking and endeavor. On nearing the woods, however, patients soon look for the trees, and in uncanny fashion come to know which they are, select their favorite oak, dickory, maple or chestnut, seek shelter during storm, shade during heat, and camp 'neath his branches till sundown. Let him shirk this responsibility, and he is no physician.

The effectiveness of a group of physicians in a hospital depends on their degree of intellectual sympathy. Whether they agree, or agree to disagree, do they talk the same language? "It is not enough to have earned our livelihood. Either the learning itself should have been serviceable to mankind, or something else must follow."

Our hospitals have the mechanism for using groups or individuals. Have they the men? If they have, the mechanism matters less than we think.

"'What d'ye think about it?' asked Mr. Hennessey.

"'I think,' said Mr. Dooley, 'that if th' Christyan scientists had some science an' th' doctors more Christyanity, it wudden't make anny diff'rence which ye called in—if ye had a good nurse.'"

Though my talk may seem one of compromise, my spirit is not. Let the group or the individual bear our hospitals' responsibility as the evolution in any community or its hospital dictates. Show care in the selection of the individuals, however, that they be in intellectual sympathy and speak the common language of truth. Let responsibility be tangible—best, individual; but, if grouped, preserve personality. Finally, above all, remember: "These men are predestined: if a man love the labor of any trade apart from any question of success or fame, the gods have called him."

THE PURPOSE OF AN INTERNSHIP*

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Universities, medical schools and hospitals are interested jointly in the education of those who will care for the sick, and aid in the prevention and cure of disease. Of the students now in our medical schools, most will soon be engaged in some form of medical care of patients; some will enter administrative positions; others will devote their efforts to study and search for new facts in medicine perhaps entirely apart from patients; but no matter what their field of medical activity, all will be better men as well as physicians if they have the broadening experiences of a hospital internship.

The student entered his medical course after two to four years of study in college which included certain of the sciences, biology, chemistry, mathematics, physics and languages, and thereby presumably had some training in methods of study and thinking. The first two medical years, devoted mainly to the preclinical medical subjects, have given him a good training in the fundamentals of medicine. In his last two medical years he has been in contact with patients for more than half his time. The increased facilities of medical schools afforded by hospital clerkships and enlarged dispensary services, including obstetric services, have brought the student into close contact with patients during these two years, and he no longer receives his first introduction to actual patients on entering on his internship. He has studied to better advantage by reason of his clinical contacts, and is much better prepared up to this point for the practice of medicine than was the student of ten years ago. He is not a high school boy.

It is agreed that he now needs a hospital internship. What should this internship give him? First and foremost it should develop further his character, through close daily contact with attending men of high ideals. He should see by daily observation how honesty, sincerity, sympathy, are combined with knowledge and experience in dealing with the medical and surgical problems of each patient. Here in the hospital he sees more of the joy and of the tragedy of life than anywhere else in the world. He sees life at its best and at its worst, and while still in his formative years acquires that broad sympathy with humanity which physicians more than any others should and must have.

He learns how to get on with crabbed sick folk who might or might not be crabbed if they were well. He puts in practice what he has learned of the uses as well as the limitations of instruments of precision and of clinical and biologic tests, and gets a sense of relative values when he combines them with history and physical examination in the making of a diagnosis. He learns how to deal with difficult situations, involving diagnosis and treatment by meeting them himself under direction, and continually adds to his store of experience. It is obvious that in one or two short years he cannot see all the kinds of medical conditions which he will meet during his coming years of practice. He sees many examples, and above all he acquires methods of approach and observation. He learns to work in cooperation with others and to take his place in the team. He learns to use his hands and his senses. His education has just begun, to continue all through his years of professional life.

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Such an opportunity is essential to his further development, whether he is planning to devote himself to medical research or to some form of medical practice.

The hospital that best fulfils its functions of caring for the sick and of educating its staff, nurses and the public offers to the interne the best opportunity for carrying out the purpose of an internship. In some hospitals, the organization of the staff and the relations of the several departments to one another are best suited to a rotational type of intern service; in other hospitals the organization calls for single services or combinations of services. The individual needs of hospitals as well as of students vary.

The purpose of a hospital internship is not to supply deficiencies of the medical curriculum nor to complete a medical education. It sometimes happens that those charged with the administration of the medical school are willing to comfort uneasy consciences with the thought that evident defects or lapses in this or that department of medicine will be remedied in the student's internship. Weak or inadequate instruction in practical obstetrics, for example, should be frankly charged against the medical curriculum rather than covered up in the hope that the student will secure a month or so of obstetrics in a rotational internship.

Nor is the function of an internship to make specialists. The essential foundation for a specialist is a wide general medical experience on which he may build his superstructure of special knowledge. It has been felt by some that the single medical or surgical service tends to direct young men toward early specialization. No doubt, if the internship itself were the deciding factor determining specialization, this tendency would probably be more evident in single than in rotational internships. A recent inquiry by Dr. Gatewood among more than 150 physicians who served nonrotational internships indicates that their choice of a special service was usually prompted by a desire to be associated with some physician, and that the nonrotational service itself was not a determining factor leading to specialization.

If the chief of a single service has high ideals for his specialty, he will outline a further long program for the aspirant which will insure a wide clinical experience. The fear that a year of internship in internal medicine or surgery may contribute to premature specialization seems unwarranted by facts. A much greater danger to both interns and patients is met in certain rotational hospitals whose internships are much sought after, because of the loose organization which allows interns to perform operations without necessary supervision.

The purpose of an internship is not primarily to afford opportunity for the formal investigation of a problem. Now and then the exceptional intern, usually more mature than the average, continues some inquiry already begun, or makes a creditable study of some clinical topic in which he becomes interested; but the duties of an intern in the study and care of his patients should have first claim on his time, and any additional available hours are usually best spent in needed outdoor recreation or in reading. The essentials of research concern the attitude of mind of the student, rather than the subject of the inquiry, and habits of thoroughness, of scientific curiosity and of careful observation may be acquired in the ward as well as in the laboratory. The atmosphere of research and of desire for knowledge and truth in the hospital will influence him daily in making and recording his observations, and may happily lead him to undertake further independent study during his later residence.

The purpose of an internship is not to make possible the operation of the hospital nor to assist the hospital in meeting the technical requirements of some standardizing agency, although the maintenance of satisfactory intern service by the hospital does aid it materially in attaining both these ends. The days when hospitals exploited their interns by exacting services which should be performed by orderlies are largely past, but there still remain in many of our better hospitals certain uncorrected errors, such as the overloading of interns with an enormous mass of routine laboratory examinations demanded by some medical services, or the assignment of one intern to so many surgical attending men that, by reason of the multitude of operations, he has insufficient time to study and examine his patients, or the appointment of two or three interns to care for hundreds of patients, thereby inculcating habits of superficial examination which too often grow uncorrected in the young physician as the years go on.

The intern is an important part of the great cooperative enterprise of the modern hospital. He will work faithfully and grow in professional stature, if he is not overloaded, and if he is early led to enter into that spirit of friendly cooperation between attending staff, nurses, administration and patients which characterizes the well ordered progressive hospital, a spirit that may be described as a hospital consciousness.

A number of questions arise in the selection and organization of hospitals in which the student is to carry out the purpose of the internship, among which are methods of supervision of this internship and the kind of internship that is likely to be most satisfactory. Some medical schools have undertaken to supervise one year of the internship by requiring a fifth or hospital year as a prerequisite to the medical degree, and delegating the supervision of this year to a group of faculty members usually called the fifth year committee. This arrangement assures that all students will take internships in hospitals complying with certain minimum standards, and thus protects some of the less critical students from errors in selection of their hospitals. Fifth year committees have incidentally been of great assistance to hospitals, in pointing out, and in helping them to remedy, their defects. The administration of a fifth hospital year is, however, only one of the ways in which the student may be launched on his career on leaving the medical school, and there are those who prefer to have the supervision of the medical school cease at the end of the four years of study.

There has been much discussion as to whether a rotational internship should be insisted on for all students, and some states have gone so far as to prescribe the character of the internship and the time to be devoted to medicine, surgery and obstetrics. It will probably be admitted by all that the organization and administration of a majority of hospitals in this country are best adapted to a rotational service, and that even in hospitals offering single longer services a combination of two services is frequently desirable for the intern. But the needs of students are not all the same, and to insist that the education of every student shall conform in all its details with one rigid standard tends to reduce the ideals of professional education to the dead level idea of the trade union. Standardization has done much for medical education and for hospitals, and makes possible large results with minimum effort; but quantity production never produced a new model.

The suitability of a hospital for the purpose of an internship depends on the ideals and character of its staff, on the ability and desire of its administration to provide the best care possible for the sick, and on the presence of a spirit of inquiry and progress, and not primarily on whether it has a rotational or a nonrotational system.

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IMMUNIZATION AGAINST DIPHTHERIA

WITH TOXIN DETOXIFIED WITH SODIUM RICINOLEATE

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The present paper is the outgrowth of work begun by one of us [1] in 1919 on the effect of the surface tension of the culture medium on bacterial growth. In a series of papers published since then it has been shown that bacteria may be divided into two main groups with respect to their behavior toward surface tension depressants: one group, which is represented by the colon-typhoid organisms, grow well in mediums of low surface tension, while the other group, represented by pneumococci, streptococci and the tubercle bacilli, are extremely sensitive to slight lowering of the surface tension of the medium. In fact, members of the latter group are rendered nonpathogenic by exposure for short periods of time to proper surface tension depressants, such as sodium ricinoleate.

In attempting to find the most suitable surface tension depressant for biologic work, it was found that sodium ricinoleate served this purpose better than anything else tried, since it could readily be purified from castor oil, is very soluble in water, is active in reducing the surface tension in the p_H ranges of culture mediums, and gives solutions of low viscosity. Other soaps, especially of the unsaturated fatty acid series, may also be used, but none measure up to the salt of ricinoleic acid. We have therefore used sodium ricinoleate in most of our experimental work.

Having found that many pathogenic bacteria, such as pneumococci and streptococci, were rendered noninfective by treatment with sodium ricinoleate, Larson and Nelson [2] studied its effect on bacterial toxins. They found that tetanic toxin and diphtheritic toxin were instantly detoxified in a solution of purified castor oil soap when mixed in the proper ratios.

Although the toxins are instantly detoxified when appropriately mixed with sodium ricinoleate, their antigenic properties remain unimpaired. This observation suggested the possibility of using this method to modify bacterial toxins for immunizing purposes. All known bacterial toxins are too toxic to be used in public health work without first being modified so as to be rendered nontoxic. The sodium ricinoleate method proved to be valuable since it promptly detoxifies the toxin without altering its antigenic properties. In studying the immunizing properties of toxins modified in this way, Larson, Nelson and Evans [3] found that guinea-pigs and rabbits could readily be immunized against both tetanic and diphtheritic toxins with such material. It was found, however, on further investigation, that botulinic toxin formed the exception to the rule, since its toxicity was not perceptibly modified by sodium ricinoleate.

It has long been known that botulinic toxin differs in one respect from diphtheritic and tetanic toxins, in that it is not "destroyed" in the digestive tract as are the latter two. The observation that animals otherwise sensitive to diphtheritic and tetanic toxins cannot be intoxicated when these toxins are introduced into the digestive tract may possibly be explained by the action of the bile. The bile soaps undoubtedly detoxify these toxins, while botulinic toxin is not so changed. This is in full agreement with clinical observation. Indeed, the alimentary canal constitutes a thirty-foot culture tube teeming with unnumbered varieties of bacteria, some of which are undoubtedly producing toxins constantly. Had nature failed to provide an effective detoxifying mechanism, the host would probably not survive. Further investigation may reveal that this is one of nature's mechanisms for facilitating the development of a "natural" immunity to many of the bacteria to which man and beast are daily exposed. Some such mechanism must be of vital importance to the new-born.

The question as to the nature of the reaction between the toxin and soap is an interesting one, but one which cannot definitely be answered until we know something of the chemistry of the respective toxins. This question has been attacked by Larson, Halvorson, Evans and Green,[4] who conclude that the reaction is an adsorption phenomenon. It is, we realize, impossible at present to draw a sharp line between chemical reactions and some of those reactions which physical chemists consider to be of a purely physical nature. In fact, there are today many able chemists who deny the existence of adsorption phenomena in the sense of a purely physical combination. Whatever the nature of the reaction may be, it has been found that soaps—chiefly of the unsaturated fatty acids—and preferably sodium ricinoleate, detoxify bacterial toxins, with the exception of botulinic toxin, and that such soap-toxin mixtures are antigenic.

Having found that experimental animals, as rabbits and guinea-pigs, may be immunized with such detoxified toxins, it was then tried on human subjects. A group of laboratory workers and volunteer medical students were first injected subcutaneously with varying amounts of sodium ricinoleate solutions to determine whether the soap caused any reaction. It was found that solutions of highly purified sodium ricinoleate caused no reaction other than a slight burning sensation at the point of injection, which lasted only a few seconds. Diphtheria toxin-soap mixtures were then injected into a group of laboratory workers who had been found to be Schick positive, each subject receiving 0.125 L+ toxin in a 1 per cent soap solution in a total volume of 1 cc. The injections were followed by a mild local reaction, which followed the course of an ordinary positive Schick test. A preliminary report of this work has been made by Larson, Eder and Hancock.[5] In our later work we have used 2 per cent soap solutions, and made the injection intramuscularly, and have, in this way, eliminated the reactions. If immunization against diphtheria is ever to become universal, it is imperative that a technic be developed which will eliminate local and general reactions, that the toxin be neutralized with

1. Larson, W. P.; Hartzell, T. B., and Cantwell, W. E.: J. Infect. Dis. **25**: 41 (July) 1919.
2. Larson and Nelson: Proc. Soc. Exper. Biol. & Med. **21**: 278, 1924.
3. Larson and Nelson: Proc. Soc. Exper. Biol. & Med. **22**: 194-196, 1924.
4. Larson, Halvorson, Evans and Green: Colloidal Symposium Monograph, Chemical Catalog Company, 1925.
5. Larson, Eder and Hancock: Proc. Soc. Exper. Biol. & Med. **22**: 552-553, 1925.

substances which are nonantigenic, since the naked toxin cannot be used, and that the number of injections be reduced—preferably to a single treatment—and, further, the time required for immunity to develop should preferably be shortened to the point at which active immunization may be used to suppress an existing epidemic. The desirability of eliminating the antitoxin from the immunizing material is apparent to all because of the danger of sensitization to horse serum. The anaphylactic reaction which may result from the use of antitoxin in a case which has been treated recently with toxin-antitoxin is to be avoided in cases which are already toxic as a result of an infection. Stewart [6] has recently emphasized this point. There has been a tendency on the part of some authors to minimize the danger of sensitization. We admit that the small amount of serum that is given with toxin-antitoxin is not likely to produce a severe anaphylactic reaction. However, it is sufficient to sensitize against the respective serums. It is this sensitization which is undesirable should it be necessary to give serum from the same species of animal to an individual who is already toxic from some infection. Recognizing this objection to the original toxin-antitoxin, efforts have been made recently to substitute antitoxin prepared from goats, since goats are not generally used in the preparation of commercial antitoxins. This is without doubt a step forward, but it will not entirely eliminate the danger of anaphylaxis, since it is now known that serums of different animals may contain common proteins. Friedberger and his pupils have proved this beyond any doubt.

Immunization with Soap Toxins in Diphtheria

Number of Cases Treated	Number of Cases Retested	Time of Retest, Weeks	Dose, L +	Number of Treatments	Number Negative	Per Cent Negative	Per Cent Soap	Volume, Cc.
576	54	8	0.125	1	36	66.6	1	1
	4	6	0.25	1	4	100	2	1
	23	12	0.125	2 (7 day interval)	11	47.8	1	1
	70	5	0.18	1	27	38.5	2	1
Total...	151	12			76	52		

The use of sodium ricinoleate as the detoxifying agent eliminates the danger of sensitization to foreign substances, since it is not antigenic. In this age of serums and vaccines, the importance of this point cannot be overemphasized. Until the time arrives when antitoxins can be purified to the point at which their use will not sensitize the patient to animal serums, their use should be reserved for emergencies.

Whatever the technic of antidiphtheritic vaccination may be, it is imperative that the injections cause little or no reaction. The sodium ricinoleate method of modifying the toxin is equal to antitoxin in this respect. Another most desirable improvement in the technic would be reducing the number of injections, preferably to one treatment. Since antidiphtheritic immunization is so slow in getting under way, it may not be possible to meet this condition in all cases, although, as may be seen from the accompanying table, it appears not to be an impossibility.

After having satisfied ourselves that diphtheritic toxin-soap was fully equal to, and in many respects superior to, toxin-antitoxin as an immunizing agent, we felt that we should thoroughly investigate the possibility of immunizing with one treatment and, further, to determine the optimal interval between treatments for the best results, should repeated injections seem necessary. We have therefore given but one injection in the group of cases we are reporting, in order to study the maximum effect resulting from such a treatment. The subjects were institutional patients, largely of school and preschool ages. Unfortunately for this type of work, the patients do not remain in the institution for more than a few weeks at a time, which makes observation and retesting difficult. This circumstance accounts for the fact that only about 25 per cent of the subjects treated have been retested.

The accompanying table shows that immunity developed in 38.5 per cent of our cases within five weeks following one injection. In fact, we have seen a Schick test turn from positive to negative in ten days. In another group of 54 cases, 66.6 per cent became negative to the skin test in eight weeks. This was undoubtedly a particularly favorable group, and apparently a higher average than can be maintained using the present technic, since only 52 per cent of a larger group of 151 cases gave a negative test after twelve weeks. However, the fact that a 1 per cent soap solution was used instead of a 2 per cent may be a factor. This percentage of negatives will undoubtedly rise very considerably during the next three months.

Repeating the number of injections does not seem to increase the number of negative skin tests within the first twelve week period. Out of a group of twenty-three subjects given two injections at an interval of seven days, only 47.8 per cent gave negative tests twelve weeks from the time they received the first treatment. Retests which are now under way indicate that the percentages of negative skin tests will be very much higher at the end of the six month period.

There will undoubtedly be a considerable number of cases which will not immunize from a single treatment. We are then confronted with the problem as to the optimal interval between treatments for best results. We have, largely by force of habit, fallen into the routine of repeating vaccine treatments about a week apart. Since diphtheritic immunization is slow in getting under way, it would seem more logical to give the second treatment—when necessary—after a longer interval. We plan to make a more complete report on this point, as well as on other unsettled phases of the problem, in a future article. It is realized that the number of cases in our series is small. However, we feel we have shown that the sodium ricinoleate method is practicable and safe. The soap-toxin mixtures are, we believe, superior antigenically to toxin-antitoxin, and are free from the shortcomings of the latter. On the basis of the results reported in this paper, and elsewhere, we do not hesitate to recommend the sodium ricinoleate method as safe and effective in immunizing against diphtheria.

6. Stewart, C. A.: Anaphylactic Reactions Following Administration of Serums, J. A. M. A. **82**: 113 (Jan. 9) 1926.

Chickenpox First Described by Heberden in 1767.—In his essay on the death of Louis XV, published in 1774, he suggests that the king's first supposed attack of smallpox at the age of 14, thirty years before his death from this disease, was really "petite vérole volante, which is not smallpox properly so-called." It is noteworthy that varicella, which the term "petite vérole volante" signifies, was first clearly distinguished from smallpox in 1767 by Heberden in the medical transactions of the College of Physicians, which it is possible that Voltaire, owing to his interest in medical literature, may have read. Elsewhere (Précis du Siècle de Louis XV, Chap. XII) he says that the king's attack was of the putrid or malignant type, and that several of his officers contracted the disease from him and died.—Rolleston, J. D. *Proc. Roy. Soc. M.* **19**:84 (Feb.) 1926.

IMMUNIZATION AGAINST SCARLET FEVER

WITH TOXIN DETOXIFIED WITH SODIUM RICINOLEATE

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In the paper on immunization against diphtheria with toxin that has been detoxified with sodium ricinoleate,[1] a brief discussion of the action of soaps on bacterial toxins was given and references to previous publications were cited. We have therefore not deemed it necessary to repeat the discussion here.

In immunizing members of the human family against any bacterial toxin, it is necessary to have the immunizing material in a form that will give little or no reaction, as any immunizing method that is followed by a moderately severe reaction, either general or local, will not find favor with either the physician or the general public. In fact, when animal immunization against bacterial toxins was first begun, following the discovery of diphtheritic and tetanic toxins, it was found that the naked toxins were too toxic to be used in the preliminary injections. Efforts were therefore made to find some neutralizing agent that would lessen their toxicity without altogether destroying their antigenic properties. Roux and Yersin found iodine trichloride of value for this purpose. Later, antitoxin replaced the iodine salt.

In immunizing horses against bacterial toxins, in the preparation of antitoxin, it is customary to begin treatment either with a toxin-antitoxin mixture or by giving the animals an injection of antitoxin preparatory to injecting the toxin. This procedure is followed until the animals have acquired a "ground" immunity, after which they may be hyperimmunized by injecting the unmodified toxin.

Since it has not been found practical to begin animal immunization with the unmodified toxin, it would seem the more unpractical to attempt to immunize members of the human family with toxins that had not been modified so as to render them less toxic. We believe that the experiences of those who have used the naked scarlet fever toxin in graduated doses in attempts to immunize against scarlet fever support this view. General immunization against scarlet fever will probably never receive the enthusiastic support of either the physician or the general public until a method is found of modifying the toxin, so that little or no reaction will follow the treatment.

As was pointed out in the preceding paper, certain fundamental conditions must be met before any prophylactic treatment will come into general use. A method that requires numerous injections is too cumbersome to be practicable. The treatments must be brought down to a minimum, preferably one treatment; they should be followed by little or no reaction, and, to be ideal, the immunization period should be shortened to come within the incubation time of the infection, as in the case of rabies.

1. Larson, W. P., and Eder, Howard: Immunization Against Diphtheria with Toxin Detoxified with Sodium Ricinoleate, THE JOURNAL, this issue, page 998.

The ideal procedure should further enable us to suppress an existing epidemic. From the public health standpoint it is more important, in our opinion, to be able to suppress an epidemic than to give a permanent immunity, although the latter is most highly desirable.

In the work reported in this paper, we feel that we have met many of the conditions for an ideal method of immunization. By using toxin that has been detoxified with sodium ricinoleate, we have modified the toxin without altering its antigenic properties, so that a large dose of the toxin may be given without producing toxic effects. The detoxifying agent is not antigenic, and hence there is no danger of sensitizing the patient to foreign serums. By using a nonantigenic detoxifying agent, we are independent of time intervals, as well as the previous history of the patient, should reinjections seem desirable.

The so-called scarlet fever antitoxin will not serve as a detoxifying agent for purposes of immunization since the "neutral" mixture is not always stable. The "neutral" soap toxin mixtures, on the other hand, are stable, and, so far as can be determined, remain so indefinitely if properly prepared and stored.

Immunization with Soap Toxins in Scarlet Fever

Number of Cases Tested	Number of Cases Positive	Dose	Time of Retest, Days	Per Cent Negative	Time of Retest, Days	Per Cent Negative
1,542	536	.....	..	....	...	..
	18	1,000	5	48		
	39	1,500	7	64.5	180	70
	44	2,000	8	68.5		
	318		8	77.3		
	66	3,000	21	97		
	191		60	80.6		
	21	4,000	8	90		
	5	4,500	8	100		
	2	5,000	..	....		
	2	10,000	..	....		

The importance of using a detoxifying agent such as sodium ricinoleate, which reacts with all toxins, is apparent in view of the recent work of Park and Spiegel,[2] who have shown that scarlet fever toxin is not a distinct entity, as are diphtheritic and tetanic toxins, but that a given strain of the scarlet fever streptococcus may secrete four or more toxins which are unrelated antigenically. The sodium ricinoleate method enables us to detoxify all streptococcic toxins, irrespective of groups, to the point at which large immunizing doses may be given without causing objectionable local or general reactions.

Intramuscular injections of from 3,000 to 5,000 skin test doses are followed by little or no reaction. Children over 12 years of age and adults seem to be slightly more sensitive to the toxin than younger persons.

In our work we have prepared the toxin-soap so that the desired amount of toxin was contained in a volume of 1 cc.

The importance of mixing the toxin and the soap in proper ratios has been emphasized by Larson, Halvorson, Evans and Green.[3]

In the work here reported only Dick-positive cases have been treated. We have used 3,000 skin doses in most of our work, since this amount of toxin was found to give a high percentage of immunity, as determined by the skin test, in a relatively short period of time.

The accompanying table indicates that the acquisition of an immunity varies, within certain limits, directly

2. Park and Spiegel: J. Immunol. **10**: 829-833, 1925.
3. Larson, Halvorson, Evans and Green: Colloidal Symposium Monograph, Chemical Catalog Company, 1925.

with the size of the dose of toxin, although not all age groups respond to the toxin in the same degree.

The larger amounts of toxin—from 3,000 to 4,000 skin test doses—give an apparent immunity in from 77.3 to 90 per cent of the cases within eight days following the treatment.

This suggests the possibility of using active immunization in fighting a threatening epidemic. In fact, we have successfully used this method to suppress several outbreaks of scarlet fever in institutions. A detailed report of this work will be published soon.

As regards the duration of the immunity, we have found that 70 per cent of those who gave a negative skin test within eight days following the small dosages were still negative at the end of six months. It is not improbable that repeated injections of increasing doses may be necessary for the establishment of a permanent immunity. It is not possible, however, to draw conclusions on this phase of the problem at the present time.

Our table shows that only 80.6 per cent of a group of 191 were negative sixty days after the treatment. The average age of this group was nearly 20 years. This probably accounts for the lower percentage of negative Dick tests.

The work of Park and Spiegel shows clearly that a person may be immune to a given toxin and still not immune to all scarlet fever toxins. Their observations emphasize the necessity of using a polyvalent antigen in the immunizing material in order to protect the patient against the widest possible variety of toxins.

On the basis of some work we have already done, we have come to the conclusion that the antigen should contain not only the scarlet fever toxin, but the streptococci as well, in order to develop an antibacterial as well as an antitoxic immunity. Such an immunity should provide a double security against scarlet fever. It is without doubt an antibacterial immunity that follows antityphoid vaccination.

SUMMARY

Sodium ricinoleate is an effective agent in detoxifying scarlet fever streptococcic toxins, and such soap toxin mixtures give a rapid immunity without causing objectionable reactions. The sodium ricinoleate method of detoxication makes it possible to give sufficient toxin in a single injection to cause positive skin tests to become negative within a few days. It opens the possibility of suppressing an epidemic of scarlet fever by active immunization, since 77.3 per cent of positive skin tests become negative in eight days, and 97 per cent become negative in three weeks.

Chinese Medical Sayings and Proverbs.—1. Do not take medicine compounded by a doctor who is not backed by the experience of three generations. 2. To become a good doctor requires breaking the arm three times. 3. However well up one is in Wang Su-ho, it is not so good as more clinical practice. (Practice makes perfect.) 4. To be a caligraphist, requires the wasting of paper; to be a doctor, requires the sacrificing of lives. 5. Wide reading increases knowledge of diseases; more clinics give experience in diagnosis; repeated tests make properties of drugs better known. 6. The skilful doctor knows what is wrong by listening alone, the middling doctor by observation, and the inferior doctor by feeling the pulse. 7. Curved wood is found in abundance at the skilful carpenter's shop; crowds of patients are seen at a good doctor's office. 8. Doctors cannot cure their own complaints.—*China M. J.* **39**:1100 (Dec.) 1925.

A BENIGN AND CURABLE FORM OF HEMORRHAGIC NEPHRITIS *

GEORGE BAEHR, M.D.
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Acute hemorrhagic nephritis, which commonly follows scarlet fever and other forms of acute streptococcus angina, is a disease of serious prognosis, for it not infrequently leaves behind it a more or less severely damaged kidney in which all the glomeruli present evidences of a diffuse injury. As a result, the acute nephritis may gradually progress to a chronic diffuse nephritis involving the glomeruli, the tubules and interstitial tissue.

In contradistinction to this well known type of acute hemorrhagic nephritis there occurs a benign form with which most clinicians are as yet unacquainted. Attention was first seriously called to its existence by the German clinicians Scheidemandel [1] and Volhard,[2] but in the English and American literature nothing more than extremely casual references have come to my notice.

I have had the fortunate opportunity of studying fourteen cases of this benign type during the last five years. Briefly summarized, the disease occurs most commonly in young adults and is characterized by a hematuria, usually macroscopic, which may be painless. Unlike the common form of the acute diffuse disease, there are usually no constitutional symptoms. Neither edema nor hypertension develops at any time during the course. The hematuria may be persistent or recurrent in the form of brief attacks. In most instances a definite focus of chronic infection can be discovered, usually in the tonsil. The elimination of such a focus, for example by tonsillectomy, frequently results in a temporary but pronounced increase in the hematuria, followed by gradual but complete disappearance of red blood cells from the urine.

Many of the cases are at first considered examples of hematuria due to surgical conditions in the genitourinary tract. Some have undoubtedly masqueraded in the past under the general term "essential hematuria."

INCIDENCE

The youngest patient in my series was 15 years of age; the oldest, 42. Eight of the fourteen patients were young adults in the third decade of life. In fact, in my experience the disease was rather strikingly limited to young adults. There seems to be no predilection for either sex. Some of the cases were encountered in private practice, although the major experience has been obtained in the wards of the hospital.

COURSE OF THE DISEASE

There are two types of the disease which differ from each other both in their mode of onset and in their course.

Recurrent Type.—The hematuria in this type usually lasts only a few days. The intervals between attacks are variable, being weeks, months or years, and during this period the urine may be entirely normal or may at times show some red blood cells on microscopic examination. The acute angina which usually precedes the attack consists generally of a diffuse redness of the pharynx, the pillars of the fauces and perhaps the

* From the Department of Medicine, Mount Sinai Hospital.
1. Scheidemandel: München. med. Wchnschr. **60**: 1778, 1913.
2. Volhard and Fahr: Die Brightsche Nierenkrankheit, 1914.

tonsils, although in some instances a true follicular tonsillitis has been observed. The discomfort caused by the sore throat is usually not very great. The hematuria follows the angina at a variable period of time, from one to eight days after its onset, most commonly, however, within one or two days after the appearance of the sore throat.

Persistent Type.—This type of the disease is more insidious in onset, and often the hematuria is accidentally discovered by the patient who is otherwise entirely well. The macroscopic hematuria may vary in intensity from a slight reddish turbidity of the urine to a deep smoky appearance. In the more chronic cases it may persist for many months or until surgical intervention. The most striking characteristic is the complete absence of subjective symptoms in spite of the pronounced hematuria.

In this persistent type of the disease, the patients are seldom conscious of sore throat. The past history may reveal frequent attacks of pharyngitis or tonsillitis, but during the actual course of the hematuria most patients do not experience any throat discomfort. A few admit, on questioning, that they feel a slight throat irritation.

URINARY FINDINGS

Aside from the macroscopic hematuria, the urine otherwise presents few changes. The specific gravity is normal and the kidneys still possess a normal capacity to concentrate the urine during the night. Albumin is always present in variable amounts, from a faint trace to a cloud. The most conspicuous microscopic finding is the presence of innumerable red blood cells, but all kinds of casts may be found, both red cell casts and hyaline and granular casts. The casts are more or less obscured, however, by the presence of the enormous numbers of red blood cells. The total volume of urinary excretion remains unchanged.

PAIN AND OTHER SYMPTOMS

Although half the patients have had no pain or symptoms of vesical irritation, a few have occasionally complained of slightly increased frequency of urination. With the onset of the hematuria and at times during the course of the disease, the patients may experience a dull pain in one or both lumbar regions, which occasionally may radiate around the front of the abdomen and into the groin. This lumbar pain is seldom conspicuous and is usually brought to light only on questioning the patient.

Besides the hematuria and in some patients the slight lumbar pain, there are few conspicuous symptoms. As has been said, sore throat usually precedes the onset of the hematuria in the recurrent type of the disease, whereas in the more chronic persistent cases there may be little or no discomfort. Examination of the throat reveals in most instances chronically diseased tonsils, which may or may not be hypertrophied. On pressure, purulent material can usually be expressed from one or both tonsils. Occasionally the pus is thin and brownish, while at other times it is thick and creamy. In the present series a thin, brownish pus was more common.

The blood pressure always remains normal. Edema has never occurred in any of the patients. Chemical examination of the blood has regularly revealed only normal findings. Not even the slightest increase in the nitrogen constituents of the blood has ever been detected. None of the patients have shown an appreciable anemia. The phenolsulphonphthalein, the indigocarmine, the Mosenthal and other renal function tests have all been normal. In fact, except for the hematuria and albuminuria, a study of the renal function has never shown any deviation from the normal, even in the cases in which macroscopic hematuria persisted for many months.

ETIOLOGY

In the acute recurrent cases which have been preceded by a diffuse redness of pharnyx and tonsils, streptococci may regularly be found in smears and cultures from the throat, but no work has yet been done to ascertain definitely whether they have any causative relation to the condition. Nor have the organisms been studied serologically in order to ascertain whether they fall into a common group. It is therefore impossible as yet to say that they do not merely belong to the common flora of the mouth. In the persistent types of the disease, smears and cultures from the purulent material expressed from the tonsils either before or after tonsillectomy usually show the presence of an anhemolytic streptococcus.

In one of my patients the focus of infection was apparently in the antrum of Highmore. Evacuation of the pus which contained streptococci, and frequent washings until the infection had completely subsided, were followed by disappearance of the hematuria.

In one patient in whom no focus of infection was discoverable either in the tonsils or in the sinuses, a chronic pulmonary tuberculosis was present with cavitation in the right upper lobe. It is quite possible that in this instance a secondary infection of the tuberculous cavity was the source of the trouble. Volhard observed a similar case.

PATHOLOGY

In view of the fact that the disease is always benign, I have had no opportunity of studying the kidneys histologically. Volhard believes that the pathologic lesion is probably a focal disease of the kidneys. As he pictures it, occasional glomeruli are constantly being damaged either in whole or in part. Unlike the ordinary diffuse glomerulonephritis, the vast majority of glomeruli are still intact.

The lesion is probably not unlike the embolic glomerular lesions which were first described by Loehlein,[3] and which I studied rather extensively some years ago.[4] These embolic glomerular lesions are almost constantly to be found in the kidneys of patients dying of subacute bacterial endocarditis due to the anhemolytic streptococcus. I was able to show by bacterial stains that the damaged loops of the affected glomeruli often contain bacterial emboli.

However, the focal glomerular lesions of this benign hemorrhagic nephritis need not necessarily be the result of an embolic process. Some experimental studies on glomerulonephritis would seem to indicate that identical focal lesions affecting only parts of occasional glomeruli may also be produced by a purely toxic process.[5] I have also twice observed such focal glomerular lesions in the kidneys of patients in whom no endocarditis existed. Neither patient had been seen during life, so that it is impossible to state whether at any time they had presented the clinical picture of benign hemorrhagic nephritis.

3. Loehlein: Med. Klin. **6**: 375, 1910.
4. Baehr, George: J. Exper. Med. **15**: 330, 1912.
5. Baehr, George: Beitr. z. Path. Anat. u. z. allg. Path. (Ziegler's) **55**, 1913.

DIFFERENTIAL DIAGNOSIS

Embolic Glomerular Lesions of Subacute Bacterial Endocarditis.—The focal embolic glomerular lesions of subacute bacterial endocarditis are accompanied by no clinical evidences of renal disturbance beyond hematuria and perhaps slight albuminuria. The hematuria is usually discovered only on microscopic examination. Macroscopic hematuria is rarely seen and is then more commonly the result of gross infarctions of kidney parenchyma by larger emboli thrown off from the vegetations. On the other hand, patients with a benign hemorrhagic nephritis generally present a gross macroscopic hematuria. They are otherwise well, presenting no evidences of cardiac disease.

Acute and Subacute Diffuse Glomerulonephritis.—The acute diffuse glomerulonephritis which follows scarlet fever and streptococcus angina (and which may also occur as a complication of subacute bacterial endocarditis due to the anhemolytic streptococcus [6]) presents a much more important problem in differential diagnosis.

The patient should be observed daily for puffiness of the eyelids, as the edema may be transient, occurring only for a few days. Similarly, the blood pressure should be taken every day, for in mild cases of acute diffuse glomerulonephritis an elevation in blood pressure may occur only on one or two days during the first week of the disease and may be entirely overlooked. Later, of course, if renal injury should lead to a chronic diffuse nephritis, hypertension will again be observed, but this may be months or years later. A chemical examination of the blood should be made when the patient is first seen. The fluid intake should be measured and compared with the total volume of the twenty-four hour urinary excretion. If a patient develops hematuria and also presents any evidences of edema, arterial hypertension, disturbances in renal function, or an increase in the nitrogenous constituents of the blood, the possibility of a benign focal hemorrhagic nephritis may be eliminated immediately from consideration. The patient is suffering from a diffuse vascular injury.

Scheidemandel has also observed that the increase in hematuria which follows within twenty-four hours after tonsillectomy in so many of the cases of benign hemorrhagic nephritis constitutes a striking therapeutic criterion of differential diagnostic value. Curiously enough, such a phenomenon is rarely observed after tonsillectomy on patients suffering from diffuse glomerulonephritis.

Surgical Conditions.—The most important surgical conditions that may be associated with hematuria are renal or ureteral calculi, neoplasms of the kidney, papillomas of the kidney pelvis, ureter and bladder, and tuberculosis of the genito-urinary tract. Cases of benign hemorrhagic nephritis, in which the patient experiences some discomfort in the lumbar region, will always give rise to the suspicion that we are possibly dealing with a renal or ureteral calculus or some neoplastic disease of the kidney or ureter. In such instances, roentgen-ray examinations and cystoscopic studies made by a competent genito-urinary surgeon are needed before one can arrive at a differential diagnosis.

Eight of my cases have been studied by ureteral catheterization and renal function tests. The hematuria was found in all instances to be bilateral. In view of the focal character of the disease, with only occasional glomeruli involved, it is quite conceivable that the disease may at times be unilateral or that the hematuria and albuminuria may be more marked on one side than the other. Examples of unilateral nephritis have been described in medical literature, and they may possibly be examples of this disease, i. e., benign hemorrhagic nephritis, rather than the more common acute diffuse glomerulonephritis.

PROGNOSIS

The prognosis is excellent. Even patients in whom the hematuria has lasted continuously for many months have not shown the slightest evidences of a disturbance in renal function. Volhard is of the opinion that the condition, if unrecognized or allowed to continue indefinitely, may eventually lead to such extensive glomerular damage that disturbances of renal function will occur and the clinical picture of a chronic diffuse nephritis develop. I have as yet had no such experiences and cannot, therefore, confirm this important statement. It is quite likely that the patients who eventually develop evidences of renal insufficiency have primarily mild cases of the ordinary acute diffuse form of glomerulonephritis.

The following case history will exemplify this point and will also illustrate the characteristic course of the disease:

REPORT OF CASE

A woman, aged 22, who had always been in perfect health except for occasional attacks of tonsillitis in past years, discovered accidentally that the urine was bloody. On rare occasions there was a dull ache in one or both lumbar regions, but this was not very conspicuous. The hematuria persisted, and she consulted her physician, who came to the conclusion that she had a ureteral calculus. Blood pressure was normal, and there were no constitutional disturbances. Urinary frequency both day and night was not increased, and the volume of urine excreted did not differ from the normal. She then consulted a genito-urinary surgeon, who on several occasions performed a cystoscopy and catheterized the ureters. Even on cystoscopy and before the introduction of the ureteral catheters, it could be observed that a hemorrhagic urine was entering the bladder from both ureteral orifices. Catheterization of the ureters, a study of the urinary excretion from both kidneys, functional tests of the kidneys, roentgen-ray examinations and pyelograms failed to reveal a calculus or other surgical condition. The urine continued to contain macroscopic blood, a cloud of albumin and a few hyaline and granular casts, so that the physicians were forced to the conclusion that the patient was suffering from a hemorrhagic nephritis.

At this time she came under my observation, and all the studies previously made to exclude surgical disease of the kidneys and ureters were again made, with negative results. Frequent blood pressure observations over several months revealed only normal findings, the blood pressure never rising above 120 mm. of mercury. The patient was put to bed for a three week period, but without any material change in the intensity of the hematuria. There was often some slight daily variation, but macroscopic blood was constantly present in the urine.

Both tonsils were hypertrophied and conspicuously diseased. On pressure, considerable thin brownish pus could be expressed. After six months of dietetic and other therapy, the patient consented to the removal of her tonsils under local anesthesia. The tonsils were studied bacteriologically and pathologically. Cultures of an anhemolytic streptococcus were obtained. Microscopic sections revealed purulent accumula-

6. Baehr, George; and Lande, Hermann: Glomerulonephritis as Complication of Subacute Streptococcus Endocarditis, J. A. M. A. 75: 789 (Sept. 18) 1920.

tions within and about the crypts. Within thirty-six hours after the removal of the tonsils under local anesthesia, a very pronounced increase in the hematuria took place, the urine presenting a dark smoky appearance. This persisted for another twenty-four to thirty-six hours and then gradually subsided. Two and a half weeks after operation, macroscopic blood had disappeared from the urine, and three and a half weeks after the operation no more red blood cells could be found even on microscopic examination. A faint trace of albumin could occasionally be found in some examinations.

After the tonsillectomy, the patient asked advice concerning the advisability of marriage. On the basis of previous experience concerning the essential benignity of the pathologic process, it was thought safe to advise her that she was probably cured. Two years later she reported that she had become pregnant and asked advice as to the desirability of terminating the pregnancy. No red blood cells had reappeared in the urine in the interim, although at times a faint trace of albumin could be found. Phenolsulphonphthalein and other tests for urinary function again revealed that the kidneys were entirely normal. She was advised, therefore, to continue the pregnancy and she passed through the entire nine months without showing the slightest evidences of any renal disturbance.

COMMENT

In other words, the kidneys of this patient, in whom the disease had lasted continuously for six months, were put to a most severe functional test two years later and proved to be normal. It is evidently important to be able to differentiate this group of benign focal hemorrhagic nephritis from the larger and more malignant group of acute diffuse glomerular disease.

19 East Sixty-Fourth Street.

Clinical Notes, Suggestions, and New Instruments

SPORADIC TRICHINOSIS WITH EXTREME HYPOTENSION *

GARNETT CHENEY, M.D., SAN FRANCISCO

Sixty-six years ago, Zenker was the first to correlate certain symptoms in man with *Trichina spiralis* infection, and since then many cases have been completely reported both in this country and in Europe. The case here described presents an interesting problem in diagnosis and certain features little recognized as yet in America.

REPORT OF CASE

A Filipino cook, aged 25, unmarried, was brought to the hospital complaining of general weakness. He had lived in San Francisco for the past five years and had been well except for influenza seven years previously. Six months before, he was in a hospital following an injury to his head, but he had made a good recovery. Two weeks before entry, he began to feel weak and his legs seemed heavy. His only other complaints were a sharp subxiphoid pain, and a diarrhea the day before admission. He was unable to associate any dietary indiscretions with his present illness.

He appeared poorly nourished, apathetic and ill. The eyes, ears, nose and throat were not unusual; the anterior cervical glands were palpable; there was stiffness of the neck with pain on flexion. The lungs and heart showed no abnormalities; the blood pressure was 82 systolic and 46 diastolic. The abdomen was held rigid and was generally tender to palpation. The muscles of the arms and legs were tender to pressure; extension of the right forearm was limited and painful. The knee jerks were absent, and a bilateral Kernig sign was present.

The temperature at entrance was 38 C. (100.4 F.), the pulse 100 and the respirations 28. The blood at entrance and the day following showed a hemoglobin of 72 per cent; 10,000 and 14,500 white blood corpuscles, with a slight increase of polymorphonuclear cells in the differential count, but no eosinophils. Urine, feces and sputum were not abnormal. The Widal test and the blood culture were negative; the spinal fluid taken on the second day was normal; its examination as described by Meyer[1] revealed no larvae of trichina. Repeated careful examinations of the blood also showed no larvae, but a piece of the left pectoral muscle removed on the third day was invaded by trichinae, none being encysted.

The temperature varied between 37 and 39 C. (98.6 to 104 F.), gradually falling to normal at the end of the second week; the pulse ranged around 100, and the respirations between 20 and 30. On the second day, the blood pressure fell to 44 systolic and 18 diastolic, checked by three observers with different sphygmomanometers. One cc. of epinephrine was given subcutaneously, and the blood pressure rose to 110 systolic and 48 diastolic, gradually falling to a constant level of 70 systolic and 42 diastolic after six hours. It gradually rose during the remainder of the four weeks stay in the hospital, reaching 102 systolic and 64 diastolic at discharge. The patient lay in bed with the legs drawn up and increasing flexion of the right arm at the elbow, until it could not be extended more than to a right angle. Similar flexion of the left arm developed, and both biceps muscles became tender, hard and lumpy. On the third day, there was a leukocyte count of 23,500 cells with a differential count of polymorphonuclears, 46 per cent; lymphocytes, 12 per cent; eosinophils, 41 per cent, and transitionals, 1 per cent. As no eosinophils had been present on the previous day with a total white blood corpuscle count of 14,500, these characteristic cells had appeared as a sudden shower. The white count fell to 7,900 before discharge with only 1 per cent of eosinophils; the hemoglobin was only 42 per cent. At the end of the first week, the patient looked bad and complained of generalized muscular pains; at this time, the electrocardiogram showed occasional extrasystoles. From then on, he improved except for a tender enlargement of the cervical, axillary, epitrochlear and inguinal glands noted at the end of the second week; the spleen was not felt. These glands were barely palpable at discharge. The bowels were regular and the urine output good throughout the illness. After the diagnosis had been established, the patient recalled having eaten some partially cooked pork one week before he was taken sick. Two friends said to have eaten of the same pork had had no symptoms and had normal blood counts.

At entrance, the commonly mistaken diagnosis of typhoid fever was made, and epidemic encephalitis was considered. The absence of eosinophils in the blood during the first two days was considered strong evidence against trichinae but has been noted before in severe infections.[2] The myositis was undoubtedly responsible for the stiff neck, the absent knee jerks,[3] and the positive Kernig sign, and caused the striking, characteristic stereotyped contractions of the arm muscles. The hypotension has recently been described by Gruber[4] and other German writers, but not generally noted in this country. The rise in blood pressure following the injection of epinephrine is a distinct contradiction to the reports of Maase and Zondek,[5] who found that it produced no rise in their cases. It is remarkable that the day the blood pressure was 44 systolic and 18 diastolic there were no other signs of circulatory failure and that the urine output was normal. The adenopathy is an unusual occurrence. No specific treatment was given, as the literature revealed none of proved value in the later stages.

Stanford Hospital.

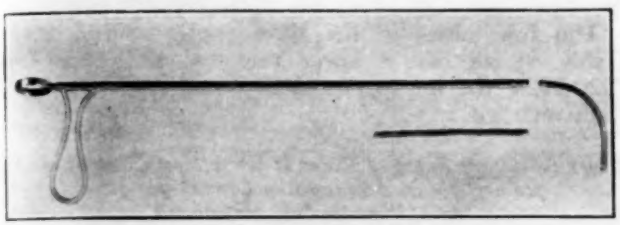
* From the Department of Medicine, Stanford University School of Medicine.

1. Meyer, Jacob: Trichinosis, J. A. M. A. **70**: 588 (March 2) 1918.
2. Gould, E. R.: Am. Med., Sept. 26, 1903.
3. Matthes, M.: Differential Diagnosis innerer Krankheiten, ed. 4, p. 113.
4. Von Gruber, G. B.: Müchen. med. Wchnschr. **72**: 1193 (July 17) 1925.
5. Maase and Zondek, quoted by Matthes (footnote 3).

A NEW UTERINE SCREEN AND INTRODUCER FOR INSERTING RADON TUBES INTO THE UTERUS

FRANK EDWARD SIMPSON, M.D., AND ROY EMMERT FLESHER, M.D., CHICAGO

The screen consists of a hollow cylindric lead tube, which has a lumen just large enough to contain our radon (radium emanation) tubes. It can easily be bent to conform to the curve of the uterine canal, its flexibility being one of the important features. Screens may be made in various lengths and may contain from two to four or more radon tubes placed end to end. The screen containing two radon tubes is 5 cm. long, and each additional tube adds 1.75 cm. to its length. The wall thickness is 0.75 mm., the diameter of the lumen being 2.5 mm., and the outside diameter 4 mm. Each end of the screen is fitted with a nickel plated brass screw cap, which is provided with an eyelet through which a strong silk thread may be passed.



Screen and introducer.

The introducer is 30 cm. long and contains an obturator. One end of the obturator is divided into two jaws for the reception of the screen, the other end being provided with a ring. The screen may thus be clamped in the distal end of the introducer or released from it, by pulling or pushing on the proximal end of the obturator. The principle is the same as that used in the construction of the screen holders described by Simpson.[1]

ADVANTAGES

1. The screen can be bent to the required curve and introduced into the uterus, usually without bringing the cervix down.

2. The screen forms a radioactive rod of the desired length, so that the whole uterine canal may be effectively irradiated. From 500 to 1,000 or more millicuries may be used, the time of exposure being, approximately, from one to three hours, depending on the quantity of emanation.

3. In making intracervical applications in cancer of the cervix, dilation is seldom necessary. Trauma is thus minimized, and the danger of causing metastasis is probably greatly lessened. The same type of screen and introducer may be used in applying radium salts, but the increased bulk of a screen containing large quantities of radium salts would be a serious disadvantage. The lead screen, on account of its flexibility, has been found useful in treating other cavities. The screen can be straightened by being rolled between two smooth wooden blocks. After it has been bent and straightened a few times, it is liable to be inadvertently broken, but this danger may be obviated by frequently using a new screen.

59 East Madison Street.

1. Simpson, F. E.: Radium Therapy, St. Louis, C. V. Mosby Company, 1922.

Periarticular Fibrositis.—This is a special variety of a generalized fibrositis affecting the fibrous capsule of the joints. The characteristic lesion of fibrositis is the replacement of inflamed fibrous tissue by scar tissue, which is liable to contract. This contracture leads to thickenings which, if still the seat of inflammation, are tender and form nodules, and to shortening of the ligaments, which, if allowed to persist, pull on the ends of the opposing bones, resulting in deformities. In periarticular fibrositis there is no definite swelling of the joint, and the wasting of the surrounding muscles is that of disuse rather than of trophic disturbances. —Gordon, R. G.: *Brit. M. J.*, Jan. 9, 1926.

Special Articles

DIPHTHERIA MORTALITY IN LARGE CITIES OF THE UNITED STATES IN 1925

The first annual summary of diphtheria mortality in the cities of the United States with a population of more than 100,000 appeared in THE JOURNAL in 1924.[1] The third summary, for 1925, is presented here. Population estimates are the same as those in the article on typhoid.[2] The number of deaths from diphtheria used in calculating death rates has been sent us in each instance by the local health authorities, and we are under obligations for the generally prompt response to our request. The geographic divisions of the U. S. Census Bureau are used as in previous years.

As in former summaries, we have not attempted to adjust diphtheria rates on the basis of age, sex or racial distribution of the population, although these factors are well known to have great influence on the crude rate. Our reasons for this are given in the second summary.[3]

The New England cities (table 1) for the most part had very low diphtheria death rates in 1925 as compared with the 1920-1924 average. New Haven, for the second successive year, reports the remarkably low rate of 1.7 and again stands among the best on the Honor Roll. Lowell also shows marked improvement. Worcester, which seems to have had something of a diphtheria epidemic in 1924, again brings up at the foot of the New England cities, although with a materially lowered rate (14.6: 23.0). Boston starts the new quinquennium with the lowest diphtheria rate in its history (12.7), a substantial reduction from its five-year average (20.2). Hartford, which for 1890-1894 lost

TABLE 1.—*Death Rates of Cities in New England States from Diphtheria (Including Croup) per Hundred Thousand of Population*

	1925	1920-1924	1915-1919	1910-1914	1905-1909	1900-1904	1895-1899	1890-1894
New Haven	1.7	7.1	14.2	14.9	22.7	15.6	54.8	74.5
Lowell	3.6	16.7	23.5	20.6	31.0	59.3	44.3	36.4
Hartford	3.7	11.9	13.8	25.3	28.1	38.8	47.8	120.9
Springfield	4.2	15.4	24.9	19.1	31.3	29.6	51.3	68.2
Cambridge	5.8	8.9	12.9	23.8	25.3	46.7	71.9	58.0
New Bedford	7.5	16.5	17.0	20.9	22.6	25.1	53.6	90.0
Providence	7.5	15.8	29.3	26.8	30.7	41.2	53.5	55.3
Lynn	8.7	17.0	17.8	17.2	21.7	28.0	44.0	49.4
Fall River	11.6	25.5	23.6	24.0	34.4	50.1	43.8	46.9
Boston	12.7	20.2	26.3	20.0	26.2	53.7	83.9	112.2
Bridgeport	13.9*	19.6	23.4	23.3	26.8	34.2	63.9	79.3
Worcester	14.6	15.5	14.1	21.3	32.2	16.5	50.3	47.8

* Rate calculated on figures for population in 1922.

annually 121 lives per hundred thousand from diphtheria, in 1925 did not lose four.

The cities in the Middle Atlantic states (table 2) likewise make an admirable showing, all but two having a diphtheria rate in 1925 below the 1920-1924 average. New York again reaches a low mark, a splendid tribute to the indefatigable efforts of the health department of that city. It is a piece of good luck for Camden, which brings up the tail of the column in typhoid this year,

1. Diphtheria Mortality in the Large Cities of the United States, J. A. M. A. **83**: 918 (Sept. 20) 1924.
2. Typhoid in the Large Cities of the United States in 1925, J. A. M. A. **86**: 948 (March 27) 1926.
3. Diphtheria Mortality in the Large Cities of the United States in 1924, J. A. M. A. **84**: 1269 (April 25) 1925.

that it should be saved from the same ignominy in diphtheria by the maiden effort of Utica. In three other Middle Atlantic cities—Syracuse, Paterson and Buffalo—the 1925 rate shows a truly amazing decrease in comparison with the 1920-1924 average.

TABLE 2.—*Death Rates of Cities in Middle Atlantic States from Diphtheria (Including Croup) per Hundred Thousand of Population*

	1925	1920-1924	1915-1919	1910-1914	1905-1909	1900-1904	1895-1899	1890-1894
Syracuse	2.7	22.9	12.9	16.6	17.4	17.7	31.1	55.4
Paterson	4.9	18.5	13.5	16.1	25.5	52.9	111.8	145.4
Buffalo	5.8	24.0	27.3	22.0	18.4	24.8	53.3	60.9
Trenton	6.1	7.3	8.8	12.3	15.8	23.6	92.7*	89.7*
Albany	7.6	12.8	10.4	20.0	31.6	26.9	....	....
Pittsburgh	9.2	20.1	22.3	29.3	20.4	36.9	32.9	86.4
Newark	9.3	9.7	14.6	23.3	30.1	46.7	79.1	92.2*
Yonkers	9.7	17.0	17.7	25.3	....	....	....	....
New York	10.8†	14.0	21.8	28.0	40.0	58.0	85.8	134.4
Reading	11.5	21.1	16.9	35.7	29.2	70.1	72.0	94.1
Scranton	13.4	12.3	22.1	23.4	....	....	77.8*	48.6*
Jersey City	13.6	18.4	21.0	23.2	32.6	57.9	85.4	108.6
Philadelphia	15.9	16.7	22.7	24.6	34.1	50.0	100.6	119.4
Rochester	16.4	16.9	12.7	22.1	32.4	32.3	45.9	96.6
Camden	21.0	20.3	23.2	38.8	48.9	52.6	100.3*	194.0*
Utica	22.6	....	....	....	....	....	....	....

* Diphtheria deaths from Chapin's Municipal Sanitation.
† Rate calculated on figures for population in 1924, with same annual increment added as in 1922-1923, 1923-1924.

TABLE 3.—*Death Rates of Cities in South Atlantic States from Diphtheria (Including Croup) per Hundred Thousand of Population*

	1925	1920-1924	1915-1919	1910-1914	1905-1909	1900-1904	1895-1899	1890-1894
Norfolk	1.0*	4.3	4.1	6.7	....	....	....	....
Atlanta	4.4†	13.3	10.1	12.5	14.2	11.1	10.5	8.8
Baltimore	6.0	11.4	13.5	14.2	16.1	33.0	68.1	70.0
Washington	7.4	10.5	11.9	6.9	11.2	23.5	50.9	77.9
Richmond	16.1	9.8#	5.8	7.0	9.8	24.4	17.6	59.7
Wilmington	20.2	11.6	15.2	18.0	27.8	50.9	84.9	83.8

* Rate calculated on figures for population in 1924, with same annual increment added as in 1922-1923, 1923-1924.
† Rate calculated on figures for population furnished by the department of health.
# The rate for Richmond was erroneously given as 2.2 in the diphtheria survey for 1924; the correct figure of 12.0 is used here.

The South Atlantic cities (table 3) had a somewhat checkered year, Richmond and Washington apparently suffering in 1925 from diphtheria more seriously than for some years, while the other four cities show a notable reduction.

TABLE 4.—*Death Rates of Cities in East North Central States from Diphtheria (Including Croup) per Hundred Thousand of Population*

	1925	1920-1924	1915-1919	1910-1914	1905-1909	1900-1904	1895-1899	1890-1894
Akron	2.4#	10.4	18.9	27.8	....	....	....	....
Dayton	2.9	9.4	9.3	22.1	....	....	38.0*	116.0*
Columbus	3.2	8.5	7.6	12.1	10.5	11.6	....	....
Cincinnati	3.4	10.6	13.2	13.9	17.0	17.3	37.3	108.7
Flint	3.8	....	....	....	....	....	....	....
Grand Rapids	4.5	19.6	13.5	20.0	26.6	17.2	32.4	99.2
Youngstown	5.0	18.5	11.9	40.5	33.5	28.0	17.6	....
Canton	5.6	....	....	....	....	....	....	....
Indianapolis	6.7	11.7	21.4	13.5	13.3	15.9	36.4*	97.3*†
Chicago	8.0	17.5	31.2	37.9	27.0	33.9	69.7	117.3
Toledo	9.0	22.4	14.1	25.4	20.4	56.8	34.6	89.3
Detroit	9.5	24.3	32.2	33.3	22.6	38.5	62.9	132.9
Milwaukee	11.6	11.4	19.8	27.8	26.4	22.7	51.7	116.2
Cleveland	14.7	14.7	20.0	24.6	29.8	42.6	45.3	95.7

* Diphtheria deaths from Chapin's Municipal Sanitation.
† Data for 1891-1894.
# Rate calculated on figures for population in 1924.

In the East North Central states (table 4) only two cities have rates greater than 10, and only one (Milwaukee) shows an increase—and that very slight—over the preceding five-year average. Several cities which, like Toledo and Detroit, have maintained relatively high diphtheria rates for two decades, achieved very low rates in 1925. Chicago had a rate of only 8.0, the lowest reported for any city with more than 1,000,000 population.

TABLE 5.—*Death Rates of Cities in East South Central States from Diphtheria (Including Croup) per Hundred Thousand of Population*

	1925	1920-1924	1915-1919	1910-1914	1905-1909	1900-1904	1895-1899	1890-1894
Memphis	2.9	9.5	11.2	11.9	13.4	6.9	10.0	28.5
Louisville	5.0	10.4	9.5	9.0	....	....	39.0*	49.6*†
Birmingham	5.8	5.3	7.2	8.3	....	....	....	....
Nashville	6.6	8.0	8.9	7.3	10.3	13.9	30.1	28.4

* Diphtheria deaths from Chapin's Municipal Sanitation.
† Data for 1891-1894.

The four cities in the East South Central states (table 5) all had a lower rate for 1925 than for 1920-1924, the improvement in Louisville being especially marked.

TABLE 6.—*Death Rates of Cities in West North Central States from Diphtheria (Including Croup) per Hundred Thousand of Population*

	1925	1920-1924	1915-1919	1910-1914	1905-1909	1900-1904	1895-1899	1890-1894
Duluth	0.0	....	....	....	....	....	....	....
Kansas City, Kan.	4.3	9.8	23.1	12.4*	....	....	....	....
Kansas City, Mo.	7.3	14.4	22.8	15.7*	....	....	....	....
St. Louis	11.2	16.1	24.4	23.7	19.4	43.3	62.9	67.7
Des Moines	11.4†	15.1	16.6	15.1	....	....	....	....
Omaha	11.8	22.9	35.8	15.8	24.5	20.5	28.2	82.9
St. Paul	13.4	17.5	20.7	31.4	31.1	27.9	43.3	75.4
Minneapolis	25.0	13.4	19.9	28.3	24.4	44.6	34.0	55.0

* Data for 1912-1914.
† Rate calculated on figures for population in 1924, with same annual increment added as in 1922-1923, 1923-1924.

The West North Central cities (table 6) with one exception showed material reduction in diphtheria mortality in 1925. Minneapolis evidently experienced a rather sharp epidemic which not only gave it the highest rate of any city for 1925 but the highest reported for the two years 1924-1925. The adjoining city of St. Paul had a 1925 rate only about half as great. Duluth, reporting for the first time, is apparently the first city of this size to pass a twelve-month period without a single diphtheria death.

TABLE 7.—*Death Rates of Cities in West South Central States from Diphtheria (Including Croup) per Hundred Thousand of Population*

	1925	1920-1924	1915-1919	1910-1914	1905-1909	1900-1904	1895-1899	1890-1894
Dallas	3.6	8.3	7.4	6.9	8.1	16.9	16.0	21.8
San Antonio	4.5	7.7	8.7	6.7	7.6	17.1	20.6	4.4
Fort Worth	5.8	1.8	....	....	....	....	....	....
New Orleans	6.8	6.5	11.6	19.6	10.2	11.5	17.1	51.3
El Paso	8.6	20.0	17.6	29.2	....	....	....	....
Houston	10.4	6.4	6.1	7.8	10.5	....	....	....
Tulsa	17.7	....	....	....	....	....	....	....

The cities in the West South Central states (table 7), where diphtheria mortality has apparently never been so severe as farther north, continue for the most part to have low rates. The newcomer in this group, Tulsa, however, qualifies among the ten worst in the country. Dallas, San Antonio and El Paso record much lower rates in 1925 than in 1920-1924, but Fort Worth, New Orleans and Houston show an increase.

The cities in the Mountain and Pacific states (table 8) show much greater divergence than last year: Portland, Salt Lake City, Spokane and Tacoma have higher rates, but Seattle, Oakland, San Francisco and Los Angeles have much lower. The fluctuations in this group of cities illustrate the need of caution in drawing comparisons for a limited period. All but one of the cities in this group had considerably higher diphtheria mortality in 1920-1924 than in 1915-1919, and all but two higher than in 1910-1914.

TABLE 8.—*Death Rates of Cities in Mountain and Pacific States from Diphtheria (Including Croup) per Hundred Thousand of Population*

	1925	1920-1924	1915-1919	1910-1914	1905-1909	1900-1904	1895-1899	1890-1894
Seattle	2.5*	6.6	5.5	5.2	12.5	31.8†	27.2‡	....
Oakland	5.1	18.8	8.1	10.3	16.1	29.1	....	....
Los Angeles	6.2§	14.4	7.1	7.5	15.3	25.4	35.8	46.0
San Diego	6.6	....	....	....	....	....	....	....
San Francisco	6.6	23.0	17.0	9.2	15.3‡	35.3‡	27.9‡	82.8‡
Portland	13.5¶	11.3	6.0	12.3	12.2	20.2	....	....
Salt Lake City	13.7	12.5	14.5	15.1	34.2	46.0	14.8	56.7**
Spokane	14.7	11.3	4.2	7.6	25.8	....	59.5‡	18.1**
Denver	15.7	23.2	6.7	10.2	20.8	29.6	27.3	130.2
Tacoma	18.2	12.4	7.7††	....	....	....	....	....

* Rate calculated on figures for population in 1924, with same annual increment added as in 1922-1923, 1923-1924.
† Data for 1901-1904.
‡ Diphtheria deaths from Chapin's Municipal Sanitation.
§ Rate calculated on figures for population furnished by the department of health.
‡ Data from Crum's paper in the American Journal of Public Health (7:445 [May] 1917).
¶ Data for Dec. 1, 1924, to Nov. 30, 1925.
** Data for 1892-1894.
†† Data for 1916-1919.

TABLE 9.—*Ten Cities with Highest Diphtheria Death Rates for 1925*

Minneapolis	25.0	Tulsa	17.7
Utica	22.6	Rochester	16.4
Camden	21.0	Richmond	16.1
Wilmington	20.2	Philadelphia	15.9
Tacoma	18.2	Denver	15.7

TABLE 10.—*Ten Cities with Lowest Diphtheria Death Rates for 1925*

Duluth	0.0	Syracuse	2.7
Norfolk	1.0	Dayton	2.9
New Haven	1.7	Memphis	2.9
Akron	2.4	Columbus	3.2
Seattle	2.5	Cincinnati	3.4

TABLE 11.—*Cities Showing a Continuous Decline in Diphtheria Death Rates by Five-Year Periods from 1890 to 1924*

Baltimore	Jersey City
Camden	Newark
Cincinnati	New York
Hartford	Philadelphia

TABLE 12.—*Number of Cities with Various Diphtheria Death Rates*

	40 and Over	20 and Over	10 and Over	Under 10
1890-1894	50	50	52	2
1895-1899	33	49	56	0
1900-1904	18	43	55	1
1905-1909	2	36	55	3
1910-1914	1	34	53	13
1915-1919	0	22	52	18
1920-1924	0	13	52	18
1925	0	4	28	49

It is evident from a comparison of the summaries that annual variations in diphtheria mortality are quite great. Of the ten cities with the highest rate in 1924 (table 9), only three—Denver, Camden and Minneapolis—appear in the similar list for 1925, and only four of the ten lowest cities appear on the "lowest" list for both years (table 10).

TABLE 13.—*Total Average Diphtheria Death Rate, 1923-1925*

	Total Population (70 Cities)* Estimated by the U. S. Census Bureau Methods	Diphtheria Deaths	Diphtheria Death Rate per 100,000
1923	29,243,128	3,838	13.12
1924	29,810,996	3,285	11.05
1925	31,049,595	3,024	9.74

* Seven cities are omitted from this summary because data for the full period are not available.

Tables 12 and 13 show impressively the waning of diphtheria as a cause of death. In 1925 for the first time there were more cities with rates under 10 than with rates over 10.

THE TECHNIC OF MEDICATION

A SERIES OF ARTICLES ON THE METHODS OF PRESCRIBING AND PREPARING, THE INDICATIONS FOR, AND THE USES OF VARIOUS MEDICAMENTS *

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(Continued from page 951)

PILLS

Though the word pill is derived from *pila*, a ball, it seems best to define the word, for the purposes of practical therapeutics, as rather slowly disintegrating medicinal masses of a size and shape convenient for swallowing. They should not weigh more than 0.5 Gm., or less than 0.05 Gm. If the pill is of a larger size it is called a bolus, the use of which is at present almost entirely restricted to veterinary practice; many people almost think it an insult to have a very large pill prescribed for them. Very small pills weighing less than 0.05 and more than 0.02 Gm. are called "granules." If the weight is below 0.02 Gm., they are usually designated as "parvules." While, as a general proposition, as small a pill as possible should be prescribed, it is rarely necessary to descend to the size of granules or parvules, excepting when the attempt is made to have a child swallow a pill.

The object of giving substances in pill form is to get a definite dose in compact and almost tasteless form, and to delay somewhat the rapidity with which it develops its action. They were the most popular solid dosage form before the days of the capsule. Their main characteristic from the present day standpoint is slowness of solution and hence delay in action, so that substances which are intended to act at once should never be prescribed in pill form. On the other hand, pills are especially valuable when action on the intestine is desired or slower absorption and, therefore, gentler and more prolonged action is aimed at. Sometimes pills fail to act on account of insolubility; and it has happened occasionally that pills were found in the stools practically unchanged. This is especially liable to occur in the case of very old pills, or of compressed pills, containing much insoluble material. Pills, like capsules, must not, of course, be prescribed for little children, as it is impossible to get them to swallow these. Indeed,

* This is the fourteenth of a series of articles on "The Technic of Medication." When completed the articles will be assembled in book form.

there are some adults who believe they cannot swallow pills. For this reason it is generally best, before prescribing pills or capsules, to ask the patient whether he can swallow them. If he thinks he cannot, it may still be policy to prescribe an encapsulated powder; to teach the patient how to swallow pills, and to advise him, if he fails, to open the capsule and take the powder.

Official Pills.—A number of pills are official. The average dose of these is one or two pills excepting in the case of pills of phosphorus, the average dose of which is only one pill.

It will be noted that the majority of the official pills are cathartic. By reason of their slow disintegration and tastelessness, pills are an ideal method of administration for action on the bowel. In the choice among these cathartic pills, those of aloe, it seems, deserve first place. The "A. S. and B. pills" have only their small size especially to recommend them. The addition of strychnine and atropine is of no advantage because these agents are rapidly eliminated, while aloe is slow in action; hence, by the time the aloe acts, the others have long since left the system. The combination of aloe and podophyllum in "Janeway's pills" is probably rational by combining the effect of podophyllum on the small intestine with the effect of aloe on the large intestine. When the most powerful cathartic pill is required, the vegetable cathartic pill should be preferred to the compound pills of mild mercurous chloride (formerly compound cathartic pills), unless the action of calomel is especially desired. By changing the name of the compound cathartic pills, the Revision Committee of the Pharmacopeia has probably struck a blow against the popularity of this pill, but at the same time rendered humanity a service by protecting it against the danger of mercurialism from abuse of these pills due to ignorance of their composition.

Composition of Pills

	Composition, Each Pill	Gm.
Pills of aloe	Aloe	0.13
	Soap	0.13
Pills of asafetida	Asafetida	0.20
	Soap	0.06
Pills of ferrous carbonate (Blaud's pills),	Ferrous carbonate	0.06
Compound pills of mild mercurous chloride, formerly known as "compound cathartic pills,"	Compound extract of colocynth.	0.08
	Mild mercurous chloride	0.06
	Resin of jalap	0.02
	Gamboge	0.015
Pills of phosphorus	Phosphorus	0.0006
National Formulary cathartic pills in increasing order of potency:		
Pills of aloin, strychnine and belladonna (A. S. and B. pills),	Aloin	0.013
	Strychnine	0.0005
	Extract of belladonna	0.008
Compound pills of aloe and podophyllum (Janeway's pills)	Aloe	0.065
	Resin of podophyllum	0.032
	Extract of belladonna	0.016
	Extract of nux vomica	0.016
Vegetable cathartic pills	Compound extract of colocynth.	0.060
	Extract of hyoscyamus	0.030
	Resin of jalap	0.020
	Extract of leptandra	0.015
	Resin of podophyllum	0.015
	Oil of peppermint	0.008

The Pharmacopeia also recognizes the following two pill masses, from which pills of any desired size may be ordered. The usual dose of these masses is 0.25 Gm. Mass of ferrous carbonate (Vallet's mass), containing 35 per cent of ferrous carbonate; mass of mercury (blue mass), containing 33 per cent of mercury.

Extemporaneous Pills.—Any one of the official pills may be prescribed by merely writing the official name and stating the number of pills the pharmacist is to dispense. Pills made from official masses are prescribed by specifying the name of the mass and the total quantity, to be divided into the desired number of pills. The quantity required is obtained by multiplying the dose wanted with the total number of pills. If it is desired to prescribe a pill combination that is not found in the Pharmacopeia, it will be necessary, of course, to name each ingredient and its quantity. Such a combination is known as "extemporaneous" in contradistinction to the official pills or masses (the word extemporaneous being derived from the Latin *ex tempore*, literally, "out of time," meaning proceeding from the impulse of the moment. This word is applied not only to pills but also to all other formulas written by the physician to meet the peculiar requirements of an individual patient at the time of writing).

The need for the extemporaneous prescribing of pills might be illustrated by a brief study of so-called tonic pills, generally composed of combinations of iron, quinine, strychnine and arsenic. The elixir of iron, quinine and strychnine probably owes its popularity to its pretty greenish color and the fact that physicians generally do not taste their own medicine. The excuse that this bitter dose is given for its appetizing action cannot be advanced, because it is generally given after meals; and bitters, to be appetizing, must be given before meals. Likewise, required speed of action, secured by administration in liquid dosage form, cannot be cited in extenuation, for prolonged and continuous action rather than intense and sudden effect is aimed at. Then, why inflict such nasty, bitter stuff on a patient when we have in pill administration a method of sparing the palate and securing the same result? These pills should be prescribed extemporaneously because not every patient who feels "run down" needs iron.

If we desire, therefore, to employ iron as a tonic for a patient showing secondary anemia, we have in reduced iron, in 0.05 Gm. doses, iron pure and concentrated. Strychnine should be used sparingly or not at all when there is greatly exaggerated reflex excitability. When it is prescribed, strychnine nitrate should be preferred to strychnine sulphate, because the former is stable in the air, while the latter is not; and its average dose of 0.002 Gm., rather than a probably ineffectual dose of a half or a fourth of that amount, should be employed. It is a fact, observed clinically, that suitable patients while using such "tonics," appropriately compounded, often eat better, feel better, and gain weight. Their action probably depends on the stimulation of gastro-enteric function by the arsenic (trioxide dose, 0.002 Gm.), of neuromuscular action by the strychnine—acting directly as well as possibly indirectly by its increasing the secretion of epinephrine—and maybe on some subtle influence on metabolism exerted by the arsenic and the quinine. The latter may well be prescribed in larger dose than is ordinarily employed (0.12 Gm. or more, instead of 0.06 Gm.) if the patient's pulse is rapid and he suffers from palpitation, so as to secure the heart sedative effect of the quinine. Here, again, prescribing in each unit half the dose aimed at is good practice, thus providing against possible idiosyncrasy, and giving the direction that, if no effect is noted within three days, to double the dose. Individualization is here, as elsewhere, the price of efficient medication; and correct technic decides whether the patient will give a slowly acting medicine a chance by taking it faithfully or have a partially used bottle standing about in the house as a reproach to its prescriber.

(To be continued)

HOSPITAL SERVICE IN THE UNITED STATES

FIFTH PRESENTATION OF HOSPITAL DATA BY THE COUNCIL ON MEDICAL EDUCATION AND HOSPITALS OF THE AMERICAN MEDICAL ASSOCIATION

The figures and data presented in this issue of THE JOURNAL will be best understood as belonging in three groups: (*a*) a complete census of all the hospital facilities of the United States, however owned and controlled, and for whatever type of patient; (*b*) a special study and a list of those hospitals that are intended for the accommodation of people in the communities in which they are located and as a matter of convenience designated as hospitals for community use, and (*c*) hospitals approved for the training of interns and those approved for residencies in specialties.

There are in the United States at present a total of 6,896 hospitals of all types and kinds with 802,065 beds, constantly caring for an average of 629,362 patients. The hospital departments of institutions to the number of 607, with 23,807 hospital beds and an average of 13,404 patients, are included in the foregoing figures. In addition to the total capacity just given there are 34,511 bassinets or baby cribs, making a grand total capacity for patients, including new-born infants, of 836,576. The average number of bassinets occupied is not known, but to leave them out of the count for the time being, we find that 66 per cent of all the hospital beds in the United States are constantly filled, as compared with 67 per cent for 1920 and 64 per cent in 1923.

TABLE 1.—*Total Hospitals—Giving Number, Capacity and Average Number of Patients*

State	Population, 1925	General			Nervous and Mental			Tuberculosis			All Other Hospitals			Totals			Total Cap. Including Bassinets	
		Hospitals	Beds	Av. Beds in Use	Hospitals	Beds	Av. Beds in Use	Hospitals	Beds	Av. Beds in Use	Hospitals	Beds	Av. Beds in Use	Hospitals	Beds	Av. Beds in Use	Bassinets	
Alabama	2,467,190	72	3,238	1,743	3	3,223	3,126	4	258	142	22	1,884	1,120	101	8,603	6,131	338	8,941
Arizona	407,702	21	846	484	2	692	681	20	580	348	40	2,302	1,439	83	4,420	2,952	103	4,523
Arkansas	1,852,905	53	2,567	1,425	3	2,512	2,478	1	310	296	13	1,504	851	70	6,893	5,052	97	6,990
California	4,021,320	281	18,147	12,529	32	15,398	14,407	39	2,871	2,219	138	10,912	6,243	490	47,328	35,398	2,174	49,502
Colorado	1,019,286	66	3,465	2,152	10	2,630	2,333	20	1,745	1,475	28	3,321	2,105	124	11,161	8,065	329	11,483
Connecticut	1,581,255	43	5,079	3,376	16	6,547	6,143	8	1,028	949	21	1,202	835	88	13,856	11,303	746	14,602
Delaware	234,720	8	526	264	2	750	626	2	80	62	3	65	28	15	1,421	980	77	1,498
Dist. Columbia	497,906	16	2,265	1,502	2	4,441	4,317	1	180	126	21	2,976	2,176	40	9,862	8,121	307	10,169
Florida	1,263,549	55	2,518	1,466	4	2,326	2,087	1	24	22	10	907	364	70	5,775	3,879	286	6,061
Georgia	2,858,260	68	3,856	2,183	5	4,810	4,729	2	272	254	24	1,928	1,107	99	10,866	8,273	330	11,196
Idaho	492,071	38	1,188	600	4	974	900	...	.....	.....	12	534	325	54	2,696	1,825	177	2,873
Illinois	6,964,950	236	21,456	14,468	30	24,366	22,512	21	2,631	2,316	93	6,507	4,321	380	54,960	43,647	2,824	57,784
Indiana	3,060,416	103	6,683	3,904	15	8,546	8,235	7	873	743	42	2,011	1,165	167	18,113	14,047	800	18,913
Iowa	2,505,769	140	6,911	4,209	15	8,268	7,770	6	615	453	36	1,527	934	197	17,321	13,366	846	18,167
Kansas	1,812,986	112	4,245	2,304	11	4,922	4,273	3	178	155	21	1,327	785	147	10,372	7,517	459	10,831
Kentucky	2,488,423	74	3,777	2,105	11	5,773	5,762	4	386	307	28	1,706	1,089	117	11,642	9,063	300	11,942
Louisiana	1,879,024	38	3,964	2,661	5	4,199	3,614	3	146	90	21	2,419	1,572	67	10,718	7,937	177	10,895
Maine	782,541	42	1,882	1,141	7	2,779	2,594	5	466	390	16	603	312	70	5,730	4,437	302	6,032
Maryland	1,737,085	36	4,214	3,101	17	5,281	4,862	10	2,055	1,378	30	1,662	966	93	13,212	10,307	461	13,673
Massachusetts	4,154,746	154	14,878	11,179	36	21,494	20,671	27	3,181	2,546	88	5,749	3,804	305	45,302	38,200	2,240	47,542
Michigan	4,154,625	143	10,354	7,225	16	13,266	12,543	17	1,800	1,416	52	2,719	1,706	228	28,139	22,889	1,338	29,477
Minnesota	2,563,550	145	8,910	5,720	13	7,795	7,188	19	1,926	1,524	55	3,050	1,976	232	21,681	16,408	1,023	22,704
Mississippi	1,790,618	52	2,239	1,220	3	2,884	2,774	2	524	335	9	736	568	66	6,383	4,897	162	6,545
Missouri	3,466,781	98	9,095	6,560	21	9,470	8,805	7	1,255	1,048	54	3,696	2,149	180	23,516	18,552	691	24,207
Montana	646,806	51	2,145	1,128	1	1,500	1,372	1	150	140	17	735	463	70	4,530	3,108	316	4,846
Nebraska	1,355,371	98	4,013	2,323	5	4,225	4,068	1	140	100	23	887	536	122	9,265	6,997	512	9,777
Nevada	77,407	14	407	194	1	300	222	...	.....	.....	10	206	112	25	913	528	42	955
New Hampshire	450,171	34	1,484	940	3	1,935	1,880	2	205	160	12	405	172	51	4,029	3,152	275	4,304
New Jersey	3,506,428	84	8,960	5,921	24	10,870	9,819	15	1,975	1,615	57	3,142	1,837	180	24,947	19,192	1,176	26,123
New Mexico	379,074	21	722	321	1	492	457	7	439	319	24	1,504	941	53	3,157	2,038	63	3,220
New York	11,162,151	294	36,546	26,313	60	52,355	50,486	65	8,139	6,690	211	18,088	11,930	630	115,128	95,419	4,964	120,092
North Carolina	2,759,014	88	4,113	2,348	11	4,761	3,954	25	1,145	886	29	1,978	1,287	153	11,997	8,475	411	12,408
North Dakota	686,424	36	1,574	1,058	2	1,420	1,300	1	110	90	13	310	112	52	3,414	2,569	191	3,605
Ohio	6,321,539	170	15,740	11,103	31	18,325	17,603	13	1,705	1,389	82	4,974	3,613	306	40,744	33,708	1,693	42,437
Oklahoma	2,238,586	81	2,997	1,541	6	3,915	3,773	5	380	287	21	1,050	696	113	8,342	6,297	209	8,551
Oregon	846,061	57	2,839	1,807	7	3,962	3,648	2	266	243	23	677	400	89	7,744	6,188	504	8,248
Pennsylvania	9,317,647	230	27,910	19,824	44	26,345	25,312	25	3,618	3,004	117	7,011	3,807	416	64,884	51,947	3,100	67,984
Rhode Island	679,260	18	2,202	1,558	4	2,276	2,149	2	461	362	14	817	441	38	5,756	4,510	278	6,034
South Carolina	1,779,084	35	1,973	1,024	3	2,906	2,811	6	248	207	18	449	178	62	5,575	4,220	199	5,774
South Dakota	681,260	37	2,087	1,285	2	1,825	1,695	1	96	88	18	649	379	58	4,657	3,447	205	4,862
Tennessee	2,424,616	57	4,192	2,651	10	3,852	3,506	7	1,775	1,380	27	1,112	700	101	10,911	8,237	330	11,241
Texas	5,097,574	159	8,326	4,813	15	8,515	8,141	29	1,524	1,138	50	3,248	2,088	244	21,613	16,180	666	22,279
Utah	492,478	26	1,244	822	2	782	756	...	.....	.....	10	147	64	38	2,173	1,642	132	2,305
Vermont	352,428	24	948	572	4	1,715	1,580	2	98	80	9	250	129	39	3,011	2,361	125	3,136
Virginia	2,449,443	62	3,927	2,381	10	6,265	6,104	7	837	766	34	2,768	1,695	106	13,797	10,946	377	14,174
Washington	1,478,214	80	4,860	3,145	8	5,052	4,708	8	741	607	30	2,516	1,404	135	13,169	9,864	712	13,881
West Virginia	1,601,130	54	3,363	1,899	3	3,160	2,961	4	374	334	8	306	219	69	7,203	5,416	267	7,470
Wisconsin	2,801,008	117	7,558	4,805	47	11,167	10,279	18	1,341	1,188	44	2,905	1,922	226	22,971	18,194	1,068	24,039
Wyoming	221,812	25	878	426	2	515	516	...	.....	.....	10	772	544	37	2,165	1,486	116	2,281
Totals	113,493,720	4,041	293,301	196,743	560	341,480	322,342	466	49,131	39,669	1,797	118,153	73,608	6,896	802,065	629,362	34,511	836,576
Percentage of beds in use	.....	...	...	66	...	...	94	...	.....	80.7	...	.....	62	...	.....	78		
Population per bed	.....	...	386	..	...	332	..	...	2,310	.....	...	990	.....	...	141			

Population given in column one is according to estimate for 1925 by the United States Bureau of the Census, except for Florida, Iowa, Kansas, Massachusetts, New York, Rhode Island, South Dakota and Wyoming, which took a state census in 1925. The number of beds and the average beds in use throughout the table are exclusive of bassinets, the number of which is given for each state in the column at the extreme right.

Statistics on other types of hospitals are included in table 8, page 1014, giving number, capacity, average beds in use and other data.

The hospitals of the Possessions of the United States, from which it was impossible to obtain complete data in time for this article, number as follows:

Alaska, 29 hospitals, 594 beds.
Canal Zone, 11 hospitals, 2,904 beds.
Hawaii, 47 hospitals, 3,210 beds.
Philippine Islands, 68 hospitals, 10,072 beds.
Porto Rico, 42 hospitals, 2,226 beds.
Total, 197 hospitals, 19,006 beds.

THE 1925 CENSUS OF HOSPITALS

In making this 1925 census, the hospitals of less than five beds capacity were not counted. In regard to the 607 hospital departments of institutions, only the beds were counted that are actually used in caring for the

sick, omitting entirely all that large unknown number of beds used for custodial purposes. The various data are given by states wherever such information is believed to be of value; for comparison, the corresponding figures are given for 1920 and 1925, respectively. Whenever population figures are referred to, the 1925 estimate of the U. S. Bureau of the Census at Washington are used except in Florida, Iowa, Kansas, Massachusetts, New York, Rhode Island, South Dakota and Wyoming, in which actual returns of state censuses taken in 1925 are used.

TABLE 2.—*Counties With and Without Hospitals for Community Use*

State	Number of Counties	Counties Without Hospitals (per Cent)		Ratio Beds to Population		Percentage of Beds Occupied	
	1925	1920	1925	1920	1925	1920	1925
Alabama	67	74.6	56.7	767	646	49	54
Arizona	14	14.3	7.2	251	251	59	59
Arkansas	75	76.0	62.6	857	696	48	51
California	58	20.7	10.3	174	174	76	70
Colorado	63	53.9	46.0	209	209	72	63
Connecticut	8	0.0	0.0	312	225	73	68
Delaware	3	66.7	33.3	444	444	66	50
Dist. Columbia	1	0.0	0.0	165	58	73	83
Florida	63	76.0	47.6	583	511	58	58
Georgia	161	81.6	68.3	897	695	65	59
Idaho	44	63.4	52.2	432	432	54	52
Illinois	102	41.2	31.3	282	275	66	69
Indiana	92	42.4	32.6	500	366	66	63
Iowa	99	43.4	27.2	377	332	65	62
Kansas	105	57.1	41.9	465	410	62	56
Kentucky	120	78.3	59.1	653	548	64	57
Louisiana	64	75.0	65.6	507	378	74	65
Maine	16	12.5	0.0	389	362	60	61
Maryland	24	45.8	37.5	231	235	71	78
Massachusetts	14	7.2	7.2	254	250	63	70
Michigan	83	42.2	28.9	398	297	69	72
Minnesota	87	26.7	17.2	236	228	65	66
Mississippi	82	73.2	62.2	1,054	778	66	56
Missouri	115	77.4	61.7	431	269	64	75
Montana	56	36.4	26.8	220	274	59	52
Nebraska	93	62.4	48.3	369	304	66	59
Nevada	17	18.7	17.6	328	154	48	47
New Hampshire	10	0.0	0.0	154	268	60	63
New Jersey	21	9.5	4.9	320	207	59	72
New Mexico	31	46.4	45.1	59	259	66	52
New York	62	13.1	9.7	185	200	68	74
North Carolina	100	60.0	49.0	761	517	63	60
North Dakota	53	54.7	47.1	393	419	64	65
Ohio	88	37.5	28.4	388	373	66	68
Oklahoma	77	65.0	46.7	980	736	58	52
Oregon	36	36.1	19.4	246	246	67	70
Pennsylvania	67	20.9	20.9	286	214	69	75
Rhode Island	5	40.0	20.0	288	250	75	71
South Carolina	46	60.0	50.0	881	797	63	54
South Dakota	69	69.6	52.1	321	420	61	53
Tennessee	95	77.1	65.2	679	440	66	68
Texas	253	50.6	62.1	617	494	58	59
Utah	29	69.0	51.7	396	396	63	65
Vermont	14	28.6	28.5	470	224	69	75
Virginia	100	71.0	60.0	484	661	67	63
Washington	39	38.4	20.0	258	253	66	66
West Virginia	55	50.9	43.6	400	447	50	56
Wisconsin	71	36.6	15.4	348	224	66	74
Wyoming	22	33.3	31.8	278	289	72	55
Totals	3,069	56.0	44.0	340	291	67	69

The ratio of beds to population, found by dividing the total capacity (exclusive of bassinets) of 802,065 into the population of the United States for 1925, 113,493,720, gives a ratio of one bed to 141.5 inhabitants. This, of course, is merely a gross average, and further details regarding the ratio of beds to population in different states and districts and for different types of hospitals will be found elsewhere in this article.

The five states having the largest hospital facilities are: New York, with 630 hospitals and 115,128 beds; Pennsylvania, 416 hospitals, 64,884 beds; Illinois, 380 hospitals, 54,960 beds; California, 490 hospitals, 47,328 beds, and Massachusetts, with 305 hospitals and 45,302 beds. At the other end of the scale, the states that require the least hospital facilities are: Nevada, with 25 hospitals and 913 beds; Delaware, 15 hospitals, 1,421 beds, and Wyoming, with 37 hospitals and 2,165 beds.

The ratio of beds to population in New York is one to 96.9; Pennsylvania, 143.6; Illinois, 126.7; California, 84.9; Massachusetts, 91.7; Nevada, 84.7, Delaware, 165, and Wyoming, 102.4.

THE UNIVERSAL SERVICE OF GENERAL HOSPITALS

While the number and capacity of hospitals for nervous and mental patients is impressive, if indeed not startling, a moment's reflection tells us that those figures are supplied in the main by the large state insane asylums and other large institutions used in a large degree for custodial purposes, and that by far the great majority of all kinds of acute medical and surgical work is done in that large group known as general hospitals which, though averaging smaller in size, are distributed all over the country, as will be seen on the maps illustrating this issue, to the number of 4,041 general hospitals containing 293,301 beds, 193,743, or 66 per cent of which, are occupied all the time. While the importance of special hospitals accounted for in this survey is in no sense minimized and their number is increasing, especially in the large metropolitan centers, yet it appears that the large bulk of the practice of the so-called medical specialties takes place in the general hospitals. Accurate figures are not obtainable on the number of beds and number of patients in each of the several specialties in the general hospitals, since the large majority of them do not have the services very definitely divided, it being much more economical to let the supply of beds be flexible rather than to have a certain number of beds set aside for certain types of cases. To illustrate, the number of maternity cases cared for in the general hospitals is not known, but we do know that the 220 maternity hospitals with their 6,248 beds care for an average of 4,019 patients, not including the new-born infants. We know that these maternity hospitals have a total of 3,366 bassinets; and since we may assume that the remaining 31,145 bassinets are almost wholly in the general hospitals, it is seen, judging by this rather reliable criterion, that only a little more than a tenth of the obstetric work of hospitals is done in maternity hospitals, and nearly nine tenths mainly in the maternity departments of the general hospitals.

A graphic idea of the distribution of general hospitals is gained by glancing at the maps that illustrate this issue, symbols being used to indicate types of hospitals and showing which hospitals have been established in the last five years. It is especially worth while to notice the open white symbols showing the numerous instances in which general hospitals have been built in rural sections or small towns, where previously there was not a hospital for many miles.

HOSPITALS FOR THE NERVOUS AND MENTAL

In point of capacity, the 589 hospitals for nervous and mental patients, with a total capacity of 341,480 beds, loom extremely large. The fact that 94 per cent of these beds are filled all the time, with a total of 322,342 patients ranging all the way from mild cases to the more serious and hopeless ones, might indeed be contemplated with a degree of alarm. Of course, it is well known that the 322,342 nervous and mental patients in institutions is only a part of the large number of people suffering from that type of ailment. From an economic

point of view, this group of sufferers means large public expense. Since the cases are mainly chronic and the patients therefore indigent, the bulk of their care devolves on the state and indirectly on the people at large.

There are one or more institutions maintained in practically every state for those who are not in position to take advantage of the care and treatment in the smaller sanatoriums under private control, of which there are a large number. The plan used by the majority of states has been to care for this type of patients in large institutions running into hundreds and even thousands of beds in capacity. In one or two states, the policy has been to have more but smaller institutions. In Wisconsin there are forty-seven hospitals for the nervous and mental and they are maintained by counties. New York heads the list of states, with sixty institutions having a total of 52,355 beds and 50,486 patients; Wisconsin, forty-seven institutions, 11,167 beds and 10,279 patients; Pennsylvania, forty-four institutions having 26,345 beds and 25,312 patients, and Massachusetts, thirty-six institutions having 21,494 beds and 20,671 patients.

These figures should be contrasted with the states of small population like Nevada with one state nervous and mental hospital having 300 beds and only 222 patients; New Mexico, one with 492 beds and 457 patients, or Delaware with two, having 750 beds and 626 patients.

TUBERCULOSIS HOSPITALS

While the sufferers from nervous and mental ailments are nearly evenly distributed over the entire United States in a certain ratio to the entire population, those suffering from tuberculosis are distributed much more according to climate.

In this connection, a glance at the figures relative to tuberculous patients in different states shows at once the contrast, there being, for example, in the state of Colorado, with its population of 1,019,286, a total average of 1,475 patients, or one for each 691 of population; Arizona, with a population of 407,702, a total average of 348 patients, one to each 1,171 of population; California, with a population of 4,021,320, a total average of 2,219 patients, one to each 1,812 of population.

Contrasted with these figures are such states as Florida, which reports only one tuberculosis sanatorium, with an average of twenty-two patients, population, 1,263,549, one to each 57,434; and South Dakota, having only one institution, with an average of eighty-eight patients, and a population, 681,260; or one tuberculous patient to 7,741 population.

Along with better understanding of how to handle tuberculosis there is an increasing tendency to care for such patients in practically whatever locality the patient may live, rather than to move him to those localities which heretofore have had unwarranted reputation for beneficial effects. It might be remarked in passing that many patients, particularly those who delayed the move too long, have found their long trip to the Southwest a vain one, and in too many instances have become a public charge on the already overburdened citizens of that community. In some instances as high as 55 per cent of the total taxes of certain localities in the Southwest has gone to the care of hopelessly stranded tuberculous patients who have come in from other parts, seeking in vain for health.

An outstanding and commendable movement on the part of hospitals at the present time is that for the care of tuberculous patients in general hospitals. This movement promises considerable relief from both a medical and an economical point of view, and will doubtless increase to much larger proportions as rapidly as the general hospitals and the public come to realize the safety with which those afflicted with tuberculosis can be cared for in general hospitals when the proper precautions are understood and observed.

HOSPITALS FOR COMMUNITY USE

The accompanying list of hospitals for community use omits the state and other institutions that are devoted largely to the custodial care of incurable nervous or insane patients; hospitals limited to government beneficiaries, and the hospital departments of institutions for the deaf, blind and crippled and aged persons and prison hospitals. Hospitals of less than ten beds are not named, but the number of them is given at the end of the list for each state.

TABLE 3.—*Counties With and Without Hospitals Comparing 1925 and 1925*

State	Total Counties		Counties Having Hospitals		Counties Without Hospitals		Percentage Having No Hosiptals	
	1920	1925	1920	1925	1920	1925	1920	1925
Alabama	67	67	17	29	50	38	74.6	56.7
Arizona	14	14	12	13	2	1	14.3	7.2
Arkansas	75	75	18	28	57	47	76.0	62.6
California	58	58	46	52	12	6	20.7	10.3
Colorado	63	63	29	34	34	29	53.9	46.0
Connecticut	8	8	8	8	0	0	0.0	0.0
Delaware	3	3	1	2	2	1	66.7	33.3
Dist. of Columbia	1	1	1	1	0	0	0.0	0.0
Florida	54	63	13	33	41	30	76.0	47.6
Georgia	152	161	28	51	124	110	81.6	68.3
Idaho	41	44	15	21	26	23	63.4	52.2
Illinois	102	102	61	70	41	32	41.2	31.3
Indiana	92	92	53	62	39	30	42.4	32.6
Iowa	99	99	56	72	43	27	43.4	27.2
Kansas	105	105	45	61	60	44	57.1	41.9
Kentucky	120	120	32	45	88	75	73.3	62.5
Louisiana	64	64	16	22	48	42	75.0	65.6
Maine	16	16	14	16	2	0	12.5	0.0
Maryland	24	24	13	15	11	9	45.8	37.5
Massachusetts	14	14	13	13	1	1	7.2	7.2
Michigan	83	83	48	59	35	24	42.2	28.9
Minnesota	86	87	63	72	23	15	26.7	17.2
Mississippi	82	82	22	31	60	51	73.2	62.2
Missouri	115	115	26	44	89	71	77.4	61.7
Montana	44	56	28	41	16	15	36.4	26.8
Nebraska	93	93	35	48	58	45	62.4	48.3
Nevada	16	17	13	14	3	3	18.7	17.6
New Hampshire	10	10	10	10	0	0	0.0	0.0
New Jersey	21	21	19	20	2	1	9.5	4.8
New Mexico	28	31	15	17	13	14	46.4	45.1
New York	61	62	53	56	8	6	13.1	9.7
North Carolina	100	100	40	51	60	49	60.0	49.0
North Dakota	53	53	24	28	29	25	54.7	47.1
Ohio	88	88	55	63	33	25	37.5	28.4
Oklahoma	77	77	27	41	50	36	65.0	46.7
Oregon	36	36	23	29	13	7	36.1	19.4
Pennsylvania	67	67	54	53	13	14	20.9	20.9
Rhode Island	5	5	3	4	2	1	40.0	20.0
South Carolina	45	46	18	23	27	23	60.0	50.0
South Dakota	69	69	21	33	48	36	69.6	52.1
Tennessee	96	95	22	33	74	62	77.1	65.2
Texas	251	253	64	96	187	157	50.6	62.1
Utah	29	29	9	14	20	15	69.0	51.7
Vermont	14	14	10	10	4	4	28.6	28.5
Virginia	100	100	29	40	71	60	71.0	60.0
Washington	39	39	24	31	15	8	38.4	20.5
West Virginia	55	55	27	31	28	24	50.9	43.6
Wisconsin	71	71	45	60	26	11	36.6	15.4
Wyoming	21	22	14	15	7	7	33.3	31.8
Totals	3,027	3,069	1,332	1,715	1,695	1,354	56.0	44.0

Several hospitals that are reputed to be flagrantly unethical or to be harboring immoral or unqualified practitioners have been omitted from the list

The majority of the hospitals listed are general medical and surgical organizations, including hospitals for

the treatment of tuberculosis, nervous and mental, and hospitals designated as maternity, orthopedic and pediatric. Those marked with a star (*) are approved by the Council on Medical Education and Hospitals for internships or the fifth year in medicine. Those that are approved for residencies for graduates who have already had a general internship are marked with a dagger (†).

This list is intended solely as an inventory of community hospital resources rather than a complete list of all institutions. It accounts for a total of 4,967 hospitals, including 189 of less than ten beds capacity. The total beds amount to 388,890, the average number in use being 269,494. Bassinets were not counted as beds (table 1).

The ratio of beds to population varies greatly with communities, as will be seen by reference to table 4, showing, for example, in the District of Columbia an effective supply of hospital beds at the rate of one for each 58 persons; Nevada, one for each 154 persons, and California, one for each 174 persons. Contrast with these the situation of South Carolina, where one bed must suffice for 797 persons; Mississippi, 778, and Oklahoma 736.

The average number of patients in these hospitals for community use is 69 per cent of the capacity, as compared with 67 per cent in 1920; also during the last five years there has been an increase in this kind of hospital service from 4,013 to 4,967 hospitals and from 311,159 to 388,890 hospital beds. Increases and decreases in hospitals of all types are shown in table 8.

The accompanying tables indicate that in certain states, even where the number of hospital beds is low in proportion to population, there is still a large percentage of the hospital beds unused. The largest percentage of idle beds appears to be in Delaware, where only 50 per cent of the beds are in use; next comes Arkansas with 51 per cent and Idaho, Montana, New Mexico and

TABLE 4.—*Hospitals for Community Use Shown by States in District Groups*

State	Number of Counties 1925	Counties Without Hospitals (per Cent) 1920	1925	Ratio Beds to Population 1920	1925	Percentage of Beds Occupied 1920	1925
North Atlantic States							
Maine	16	12.5	0.0	389	362	60	61
New Hampshire	10	0.0	0.0	328	268	60	63
Vermont	14	28.6	28.5	470	224	69	75
Massachusetts	14	7.2	7.2	254	250	63	70
Rhode Island	5	40.0	20.0	288	250	75	71
Connecticut	8	0.0	0.0	312	225	73	68
New York	62	13.1	9.7	185	200	68	74
New Jersey	21	9.5	4.8	320	207	59	72
Pennsylvania	67	20.9	20.9	226	214	69	75
Totals	217	15.3	12.4	242	216	67	70
South Atlantic States							
Delaware	3	66.7	33.3	444	444	66	50
Maryland	24	45.8	37.5	231	235	71	78
Dist. Columbia	1	0.0	0.0	165	58	73	83
Virginia	100	71.0	60.0	484	661	67	63
West Virginia	55	50.9	43.6	400	447	50	56
North Carolina	100	60.0	49.0	761	517	63	60
South Carolina	46	60.0	50.0	881	797	63	54
Georgia	161	81.6	68.3	897	695	65	59
Florida	63	76.0	47.6	583	511	58	58
Totals	553	68.4	55.3	508	467	65	68
North Central States							
Ohio	88	37.5	28.4	388	373	66	68
Indiana	92	42.4	32.6	500	366	66	63
Illinois	102	41.2	31.3	282	275	66	69
Michigan	83	42.2	28.9	398	297	69	72
Wisconsin	71	36.6	15.4	348	224	66	74
Minnesota	87	26.7	17.2	236	228	65	66
Iowa	99	43.4	27.2	377	332	65	62
Missouri	115	77.4	61.7	431	269	64	75
North Dakota	53	54.7	47.1	396	419	64	65
South Dakota	69	69.6	65.2	321	420	61	58
Nebraska	93	62.4	48.3	369	304	66	59
Kansas	105	57.1	41.9	465	410	62	56
Totals	1,057	62.0	36.3	355	301	66	68
South Central States							
Kentucky	120	73.3	62.5	653	548	64	57
Tennessee	95	77.1	65.2	679	440	66	68
Alabama	67	74.6	56.7	767	646	49	54
Mississippi	82	73.2	62.2	1,064	778	66	56
Louisiana	64	75.0	65.6	507	378	74	65
Texas	253	50.6	62.1	617	494	58	59
Arkansas	75	76.0	62.6	857	696	48	51
Oklahoma	77	65.0	46.7	980	736	58	52
Totals	833	73.8	61.0	705	544	61	59
Western States							
Montana	56	36.4	26.8	220	274	59	52
Wyoming	22	33.3	31.8	278	289	72	55
Colorado	63	53.9	46.0	198	209	72	63
New Mexico	31	46.4	45.1	237	259	66	52
Arizona	14	14.3	7.2	196	251	59	59
Utah	29	69.0	51.7	430	396	63	65
Nevada	17	18.7	17.6	139	154	48	47
Idaho	44	63.4	52.2	430	432	54	52
Washington	39	38.4	20.5	243	253	66	66
Oregon	36	36.1	19.4	313	246	67	70
California	58	20.7	10.3	210	174	76	70
Totals	409	41.4	31.1	211	218	69	66
All states	3,069	56.0	44.0	340	291	67	69

TABLE 5.—*Physicians Having Hospital Connection*

State	Physicians on Staff Lists: Number of Staffs	Physicians on Staff Lists: Physicians on List	Resident Physicians: Hospitals Having	Resident Physicians: Number of Residents	Interns: Hospitals Having Interns	Interns: Number of Interns	Physicians as Superintendents	Total Physicians Connected with Hospitals
Alabama	61	825	44	83	14	33	32	973
Arizona	44	280	35	70	1	1	28	379
Arkansas	40	480	31	58	7	17	36	591
California	330	5,797	158	432	51	299	195	6,723
Colorado	79	1,717	40	83	16	62	47	1,909
Connecticut	60	1,644	44	102	18	87	34	1,866
Delaware	10	208	7	14	4	8	5	235
Dist. Columbia	20	714	27	91	18	109	25	939
Florida	44	514	29	62	6	11	35	622
Georgia	64	984	44	90	22	74	52	1,200
Idaho	39	235	22	35	1	1	22	293
Illinois	275	5,025	132	348	84	502	138	5,913
Indiana	100	1,910	56	115	22	93	55	2,173
Iowa	135	1,757	52	84	17	59	68	1,968
Kansas	102	1,026	35	66	11	48	47	1,187
Kentucky	78	910	45	97	18	54	46	1,107
Louisiana	47	849	32	96	19	121	32	1,098
Maine	48	607	21	34	4	8	23	672
Maryland	59	1,932	53	179	28	174	44	2,330
Massachusetts	196	4,676	123	356	83	374	122	5,531
Michigan	164	2,522	80	215	37	250	84	3,071
Minnesota	160	2,302	82	161	26	157	99	2,719
Mississippi	48	370	30	57	7	15	42	484
Missouri	128	2,967	82	190	42	210	76	3,413
Montana	45	285	26	51	4	6	20	362
Nebraska	77	836	48	79	18	61	53	1,029
Nevada	13	65	7	12	1	1	14	92
New Hampshire	39	451	13	23	1	1	12	487
New Jersey	138	3,121	67	132	52	192	57	3,502
New Mexico	32	138	24	49	1	4	27	218
New York	464	12,783	236	797	207	1,336	239	15,155
North Carolina	108	831	65	108	16	27	59	1,025
North Dakota	36	303	14	25	1	1	10	339
Ohio	202	3,028	98	251	66	280	89	3,648
Oklahoma	86	756	38	71	10	23	44	894
Oregon	64	543	19	38	9	31	20	632
Pennsylvania	311	5,947	154	309	114	652	139	7,047
Rhode Island	27	666	12	39	11	33	17	785
South Carolina	47	433	18	40	13	29	20	522
South Dakota	40	223	20	43	1	1	20	287
Tennessee	63	1,092	50	109	29	102	54	1,357
Texas	64	2,452	99	207	35	105	111	2,875
Utah	24	481	17	25	6	13	21	540
Vermont	28	267	6	12	4	11	16	290
Virginia	73	1,130	52	108	31	83	42	1,363
Washington	82	1,367	41	80	12	35	55	1,537
West Virginia	44	429	48	76	14	26	40	571
Wisconsin	160	1,614	64	128	33	89	66	1,897
Wyoming	25	129	13	21	1	1	16	167
Totals	4,623	79,621	2,552	5,945	1,244	5,910	2,648	94,124

Oklahoma, each 52 per cent. States representing the highest percentage of beds in use are: District of Columbia, 83 per cent; Maryland, 78 per cent; Missouri, Pennsylvania and Vermont, 75 per cent.

The encouraging progress that is undoubtedly being made all over the United States in placing hospitals in districts that have heretofore been entirely without them is indicated on the maps, particularly by the open white symbols indicating where hospitals have been opened within the last five years.

TABLE 6.—*Physicians, Nurses and Others as Superintendents of Hospitals*

State	State and Federal Hospitals			Other Hospitals			Totals			
	M.D.	R.N.	Other	M.D.	R.N.	Other	Hosp.	M.D.	R.N.	Other
Alabama	11	..	3	21	37	24	101	32	37	27
Arizona	12	1	11	16	5	36	83	28	6	47
Arkansas	9	..	1	27	16	17	70	36	16	18
California	31	..	9	162	96	187	490	195	96	196
Colorado	8	..	6	39	20	50	124	47	20	56
Connecticut	10	..	6	24	25	23	88	34	25	29
Delaware	3	1	1	2	5	3	15	25	6	4
Dist. of Columbia	11	..	1	14	3	10	40	25	3	11
Florida	7	..	2	28	17	16	70	35	17	18
Georgia	12	..	2	40	20	24	99	52	20	26
Idaho	5	1	5	17	8	18	54	22	9	23
Illinois	23	1	7	115	70	163	380	138	71	170
Indiana	12	..	12	43	44	55	167	55	44	67
Iowa	15	1	6	53	54	67	197	68	55	73
Kansas	13	1	7	32	50	41	147	47	51	48
Kentucky	12	..	3	34	31	37	117	46	31	40
Louisiana	8	..	2	24	14	17	67	32	14	19
Maine	10	..	1	13	27	18	70	23	27	19
Maryland	21	2	3	23	24	20	93	44	26	23
Massachusetts	32	..	7	90	115	59	305	122	115	66
Michigan	21	..	5	63	71	68	228	84	71	73
Minnesota	16	..	10	83	57	66	232	99	57	76
Mississippi	10	..	1	32	12	11	66	42	12	12
Missouri	14	1	4	62	30	68	180	76	31	72
Montana	6	..	7	14	17	26	70	20	17	33
Nebraska	11	..	6	42	30	22	122	53	30	38
Nevada	1	1	4	13	3	3	25	14	4	7
New Hampshire	4	..	2	8	18	19	51	12	18	21
New Jersey	10	1	11	47	46	61	180	57	47	75
New Mexico	10	..	6	17	6	13	53	27	6	10
New York	53	..	8	186	139	243	630	239	139	251
North Carolina	8	2	4	51	46	42	153	59	48	46
North Dakota	4	..	5	6	17	20	52	10	17	25
Ohio	24	..	6	65	71	137	306	89	71	143
Oklahoma	14	..	9	30	25	34	113	44	25	43
Oregon	6	..	4	14	24	41	89	20	24	45
Pennsylvania	25	3	9	114	108	157	416	139	111	166
Rhode Island	6	..	4	11	7	10	38	17	7	14
South Carolina	6	..	4	14	19	17	62	20	19	21
South Dakota	6	1	9	14	14	13	58	20	15	22
Tennessee	10	..	3	44	16	27	101	54	16	30
Texas	20	..	7	91	57	66	244	111	57	73
Utah	3	1	2	18	3	11	38	21	4	13
Vermont	5	..	2	11	7	14	39	16	7	16
Virginia	18	..	6	24	36	21	106	42	36	27
Washington	20	2	5	35	25	48	135	55	27	53
West Virginia	8	..	2	32	15	12	69	40	15	14
Wisconsin	11	..	11	55	45	100	226	66	45	111
Wyoming	4	1	3	12	11	6	37	16	12	9
Totals	623	21	254	2,025	1,655	2,274	6,896	2,648	1,676	2,528

PHYSICIANS CONNECTED WITH HOSPITALS

In connection with the 1925 census of hospitals, each institution was asked to send in a list of the physicians on its staff, also separate lists of resident physicians and of interns, and to indicate whether the superintendent or administrative head is a physician. The total number of physicians connected with hospitals, as reported on all these lists, is 94,124, and they are distributed as follows: staff, 79,621; resident physicians, 5,945; superintendents, 2,648, and interns, 5,910. In making this count it has not been possible to eliminate duplicates, of which there are many, because of individual physicians serving on more than one staff. On the other hand, no estimate is offered for those hospitals that failed to turn in their staff lists. There are 3,290 physicians on the paid staffs of 485 state, federal and national government hospitals, 433 being in New York State alone; 245 in Maryland; 237 in Pennsylvania; 197 in California, and 181 in Illinois. The 4,138 civilian hospitals that sent in staff lists had a total of 76,331 physicians on their staffs. The largest number of physicians accommodated in civilian hospitals in each of the largest states are as follows: New York, 12,350; Pennsylvania, 5,710; Illinois, 4,844, and Massachusetts, 4,513. There are 5,945 resident physicians hired by 2,552 hospitals. Six hundred and twenty-two state and federal hospitals employ 2,548 resident physicians, and 1,930 civilian hospitals have a total of 3,397 resident physicians.

PHYSICIANS AS HOSPITAL ADMINISTRATORS

Without arguing the question as to whether a medically trained man is to be preferred as a hospital superintendent, it seems quite certain that the number of such superintendents has not increased in the last two or three years. In all the 6,896 hospitals in the United States at the present time, 2,648 are administered by physicians, as compared with 2,668 in 1923. On the other hand, the number of registered nurses acting as superintendents has increased from 1,283 in 1923 to 1,676 in 1925. Superintendents having neither the M.D. nor the R.N. degree numbered 2,810 in 1923 and

TABLE 7.—*The Supply of Interns*

State	Hospitals Using Interns			Number of Interns			Lack of Interns	
	State and Federal	Other	Total	State and Federal	Other	Total	Hospitals	Total Lack
Alabama	...	14	14	...	33	33	6	8
Arizona	...	1	1	...	1	1	...	...
Arkansas	...	7	7	...	17	17	1	2
California	9	42	51	54	245	299	5	6
Colorado	3	13	16	26	36	62	4	9
Connecticut	1	17	18	4	83	87	3	6
Delaware	...	4	4	...	8	8	...	...
District of Columbia	6	12	18	58	51	109	4	4
Florida	...	6	6	11	...	11	2	2
Georgia	2	20	22	2	72	74	1	2
Idaho	...	1	1	...	1	1	...	...
Illinois	3	81	84	15	487	502	20	32
Indiana	3	19	22	14	79	93	4	4
Iowa	4	13	17	33	26	59	9	12
Kansas	4	7	11	29	19	48	...	...
Kentucky	2	16	18	2	52	54	3	3
Louisiana	3	16	19	61	60	121	3	4
Maine	...	4	4	...	8	8	1	1
Maryland	4	22	26	22	152	174	3	3
Massachusetts	11	72	83	39	335	374	7	13
Michigan	2	35	37	38	212	250	10	23
Minnesota	3	23	26	16	141	157	7	11
Mississippi	4	3	7	12	3	15	5	5
Missouri	...	42	42	...	210	210	7	9
Montana	...	4	4	...	6	6	...	...
Nebraska	2	16	18	10	51	61	1	1
Nevada	...	1	1	...	1	1	...	...
New Hampshire	...	1	1	...	1	1	2	3
New Jersey	1	51	52	1	191	192	10	15
New Mexico	1	...	1	4	...	4	...	...
New York	20	187	207	82	1,254	1,336	34	60
North Carolina	...	16	16	...	27	27	6	7
North Dakota	...	1	1	...	1	1	1	1
Ohio	6	60	66	14	266	280	3	4
Oklahoma	1	9	10	8	15	23	2	2
Oregon	...	9	9	...	31	31	2	2
Pennsylvania	9	105	114	46	606	652	...	...
Rhode Island	3	8	11	3	30	33	3	3
South Carolina	...	13	13	...	29	29	4	7
South Dakota	...	1	1	...	1	1	1	5
Tennessee	5	24	29	10	92	102	3	6
Texas	2	33	35	20	85	105	10	12
Utah	...	6	6	...	13	13	2	2
Vermont	1	3	4	1	10	11	1	2
Virginia	8	23	31	31	52	83	7	9
Washington	...	12	12	...	35	35	...	...
West Virginia	4	10	14	12	14	26	3	4
Wisconsin	2	31	33	8	81	89	2	3
Wyoming	...	1	1	...	1	1	1	1
Totals	129	1,115	1,244	686	5,224	5,910	203	308

2,528 in our present census. The following table affords comparison of 1923 with 1925 with respect to physicians, registered nurses and others in charge of hospitals:

	Physicians		Registered Nurses		Other Persons		Not Stated	
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent
1923	2,668	39.1	1,283	18.8	2,810	41.1	69	1.0
1925	2,648	38.4	1,676	24.3	2,528	36.7	44	0.6

Eight hundred and ninety-eight state and federal hospitals employ as superintendents 623 physicians, 21 registered nurses, and 254 other persons. Among the civilian hospitals, 2,025 have physicians as superintendents; 1,655 have registered nurses, and 2,274 have other persons.

THE SUPPLY OF INTERNS

The demand for interns stated in terms of the number of interns serving in hospitals is greater by far than shown by any previous survey, there being at present a total of 5,910. At the same time there are fewer vacancies for interns than previous surveys have shown. Two hundred and three hospitals reported that they could use more interns, making a total of 308 additional interns that could be used, as compared with a shortage of around 1,000 three years ago. The number of interns as compared with the number of graduates turned out by medical colleges each year is made possible because of the present tendency of hospitals to provide a second and even a third year for many of their interns. A great many interns take a year in a specialty following their year of general internship. There are in all 1,244 hospitals that use interns, as compared with a total of 2,552 that use resident physicians. Many hospitals employ both interns and resident physicians. One hundred and twenty-nine state and national government hospitals employ 686 interns, while all the remaining 5,224 interns are employed by civilian hospitals. See list of approved hospitals, page 1056.

TABLE 8.—*Summary of Hospitals According to Types of Patients Cared for*

Type of Hospital	No. in 1920	No. in 1925	Beds	Average Beds in Use	Percentage of Beds	Ratio of Beds to Population
General	3,793	4,041	296,301	193,743	66	386
Nervous and mental	593	589	341,480	322,342	94	332
Tuberculosis	476	466	49,131	39,669	80.7	2,310
Maternity	262	220	6,248	4,019	66	18,324
Army, navy, marine and veteran	172	200	43,783	28,832	65.8	2,820
Industrial	162	161	6,763	3,544	52	16,781
Convalescent and rest	137	109	4,596	3,174	69	24,454
Isolation	111	107	9,309	3,771	40.5	12,191
Children's	81	100	7,545	5,975	79	15,042
Indian	70	82	2,630	1,461	55	43,161
Eye, ear, nose and throat	58	61	2,471	1,387	56	45,930
Orthopedic	37	54	4,503	3,607	78.5	24,711
Skin and cancer	32	33	1,616	996	61.6	70,856
Venereal	7	6	122	74	60.6	900,276
Incurable	58	36	3,736	2,797	74.8	30,378
Miscellaneous	31	24	984	597	60.7	121,513
Hospital departments of institutions	750	607	23,807	13,404	56.3	4,767

COUNTIES WITH AND WITHOUT HOSPITALS

There are 3,069 counties in the United States (table 2), and while these counties do not correspond in their boundary with what might be termed a hospital community, they are the only universal unit of government as well as of area into which all of the states are divided. As a rule, the counties are large in the sparsely settled regions and small in the densely populated sections. While a county's boundaries are not coextensive with the region served by a hospital, nevertheless the county is especially adapted to showing hospital facilities by maps as well as by statistical tables, and these are a definite means for checking up the progress that is being made in extending hospital facilities to remote or hitherto unhospitalized sections, as well as the further development of hospitals in all sections.

TABLE 9.—*Growth of Hospitals—1909 to 1925*

	1909		1914		1918		1923		1925	
	Hosp.	Beds	Hosp.	Beds	Hosp.	Beds	Hosp.	Beds	Hosp.	Beds
Federal	71	8,827	93	12,602	110	18,815	215	53,869	299	87,091
State	232	189,049	294	232,834	303	292,254	386	302,206	351	317,264
Nongovernment	4,056	223,189	4,650	287,045	4,910	331,182	5,402	390,045	5,639	403,808
Hospital Depts. of institutions	.....	.....	.....	.....	.....	.....	767	24,928	607	23,097
Totals	4,359	421,065	5,037	532,481	5,323	612,251	6,830	780,648	6,896	802,065

This progress may be gaged by the fact that while in 1920 56 per cent of all the counties in the United States were without any hospitals for community use, at present only 44 per cent of the counties are without such facilities (table 3). The counties having hospitals have increased in the last five years from 1,332 to 1,715; in other words, 383 counties throughout the United States now have hospitals that were entirely without hospitals five years ago, not to mention the increase of facilities of sections that were at that time already hospitalized.

The ratio of beds to population, using as a basis the hospitals for community use, has changed in that period from 340 to 291 persons per hospital bed. This decided increase in the ratio of beds to population, coupled with the fact that there has been an increase in the proportion of beds occupied from 67 per cent in 1920 to 69 per cent in 1925, tells us that there has been a large increase in the use of hospitals for the care of the sick—in other words, people have lost the fear of hospitals and are getting somewhat the hospital habit.

The figures just cited are all the more significant for having been derived from the hospitals that serve their local communities to the exclusion, for the sake of statistics, of the institutions for custodial care.

OUTPATIENT DEPARTMENTS, ROENTGEN-RAY, CLINICAL LABORATORIES AND NURSE TRAINING SCHOOLS

Among the 6,896 hospitals concerned in the present survey, 2,046 reported having outpatient departments; 3,871, roentgen-ray departments; 3,939, clinical laboratories; and 2,247 hospitals stated that they have nurse training schools. This is the most complete check-up on these and other items that this office has yet obtained, and it is to be regretted that a more detailed report for each cannot be given at this time.

ACKNOWLEDGMENT

The Council on Medical Education and Hospitals wishes to express its deepest gratitude to the thousands of superintendents, chiefs of staffs and all others who helped make this information available.

BED CAPACITY OF GENERAL HOSPITALS AND DAILY AVERAGE IN CONSTANT USE DURING PRECEDING YEAR

This list names the hospitals that are available for active medical and surgical service in their respective localities, including general medical and surgical hospitals, also tuberculosis, nervous and mental, maternity, orthopedic, pediatric; but does not include state institutions that are devoted largely to the custodial care of incurable and nervous or insane patients; nor institutions for deaf, blind, crippled and aged persons; nor prison hospitals; nor hospitals limited to government beneficiaries, such as those of the United States Army, Navy, Public Health Service, or the Veterans' Bureau.

Hospitals marked with a star (*) are approved by the Council on Medical Education and Hospitals for internship or the fifth year in medicine. Those marked with a dagger (†) are approved for residencies for those who have already had a general internship. Hospitals marked (a) have additions under construction which are not included in the capacity reported here.

ALABAMA

	Total Beds	Av. Beds in Use
Albany, 7,652—Morgan		
Benevolent Society Hospital	28	16
Alexander City, 2,293—Tallapoosa		
Russell Hospital	54	17
Andalusia, 4,023—Covington		
Andalusia City Hospital	20	6
Covington County Hospital	25	17
Anniston, 20,531—Calhoun		
St. Luke's Hospital	25	14
Bessemer, 21,975—Jefferson		
Bessemer General Hospital	50	25
Birmingham, 265,670—Jefferson		
Birmingham Baptist Hospital	100	65
Birmingham General Hospital	75	40
Children's Hosp. of Birmingham	60	20
Fraternal Hospital, Inc.	50	30
Hill Crest Sanitarium (N.& M.)	23	12
Hillman Hospital *	140	125
Hotel Gorgas	75	40
Jefferson Tuberculosis Sanit	100	50
Norwood Hospital, Inc.	145	77
South Highlands Infirmary	135	75
St. Vincent's Hospital	110	72
Woodlawn Infirmary	45	30
Brewton, 2,682—Escambia		
Brewton Memorial Hospital	16	7
Corona, 1,500—Walker		
Corona Hospital	12	5
Demopolis, 2,779—Marengo		
Hand Bailey Hospital, Inc	14	6
The Juanita Coleman Hospital	14	3
Dr. Savage's Hospital	10	5
Dothan, 14,466—Houston		
Dr. M. S. Davie's Private Hosp.	50	20
Frasier Hospital	50	15
Moody Hospital	94	63
Ensley, 8,000—Jefferson		
Ensley Infirmary, Inc.	36	15
Eufaula, 4,939—Barbour		
The Britt Infirmary	45	25
Salter Hospital	22	10
Fairfield, 4,998—Jefferson		
Employees' Hospital *	280	210
Falls City, 85—Winston		
Snow Hospital	30	9
Florala, 2,633—Covington		
The Young Infirmary	20	7
Florence, 12,702—Lauderdale		
Eliza Coffee Memorial Hospital	40	20
Ft. Payne, 2,025—De Kalb		
Lookout Valley Infirmary	20	10
Gadsden, 19,604—Etowah		
Gadsden General Hospital	24	15
Ralls' Sanatorium, Inc.	50	20
Walnut Street Hospital	20	5
Georgiana, 1,550—Butler		
Watson Infirmary	15	7
Gorgas, —— —Walker		
Alabama Power Company Hosp.	15	6
Greenville, 3,471—Butler		
Speir's Hospital	20	7
Stabler Infirmary	12	8
Gurley, 727—Madison		
Williamson & Graham Private Infirmary	12	3
Huntsville, 8,018—Madison		
Huntsville Infirmary	40	17
Jasper, 3,246—Walker		
Walker County Hospital	55	10
Mobile, 65,955—Mobile		
Alabama Maternity and Infants' Home	15	7
City Hospital	150	90
Inge-Bondurant Sanatorium	50	30
Mobile Co. Tuberculosis Sanit	30	24
Mobile Infirmary	60	40
Providence Infirmary	100	50
Montgomery, 46,481—Montgomery		
Hale Infirmary	30	15
Highland Park Sanatorium	30	30
Laura Hill Hospital	50	40
Montgomery Memorial Hospital	55	35
Montgomery Tuberculosis Sanat.	58	28
St. Margaret's Hospital	140	85
Suggs' Hospital	35	10
Yarbrough's Sanatorium	35	20
Normal, —— —Madison		
Virginia McCormick Hospital	12	8

Total hospitals in Alabama, 101; for community use, 79; population per hospital bed, 646; percentage of beds occupied, 54; percentage of counties without hospitals, 56.7.

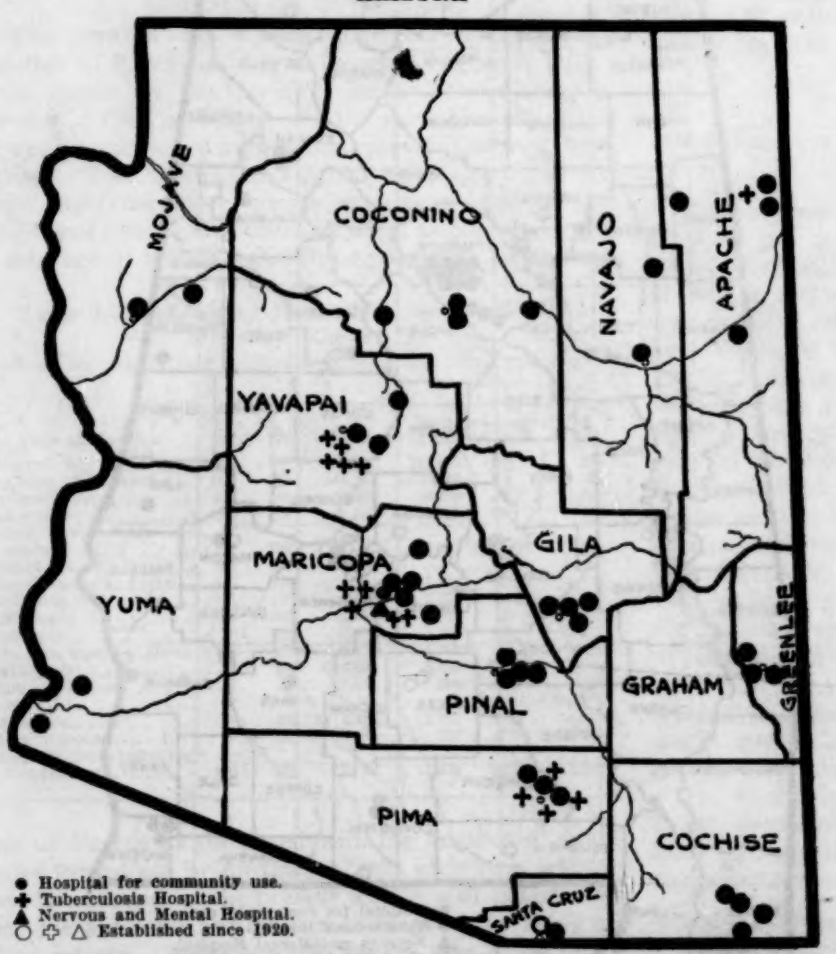
	Total Beds	Av. Beds in Use
Opelika, 4,960—Lee		
East Alabama Hospital Ass'n	30	6
Prattville, 2,316—Autauga		
Dr. Taylor's Private Hospital	14	6
Roanoke, 3,841—Randolph		
The Knight Sanatorium	39	15
Scottsboro, 1,417—Jackson		
Nye & Hodges Hospital	15	4
Selma, 16,987—Dallas		
Alabama Baptist Hospital	70	33
Burwell Infirmary	22	12
Goldsby King Memorial Hosp	52	35
Good Samaritan Hospital	50	25
Vaughan Memorial Hospital	60	35
Sheffield, 6,682—Colbert		
Colbert County Hospital	22	15
Sylacauga, 2,141—Talladega		
Drummond Fraser Hospital	35	10
Sylacauga Infirmary, Inc	35	9
Talladega, 6,546—Talladega		
Citizens' Hospital	50	15
Goodnow Hospital	20	4
Troy, 5,696—Pike		
Pike Co. Masonic Hospital	25	10
Tuscaloosa, 13,083—Tuscaloosa		
Druid City Hospital, Inc	55	30

	Total Beds	Av. Beds in Use
Tuskegee, 2,475—Macon		
Macon Co. Hospital, Inc.	15	5
Tuskegee Institute, 118—Macon		
John A. Andrew Mem. Hosp ★ (col.)	64	35
Two General Hospitals of less than 10 beds	15	8
Total for community use, 79	3,814	2,083

In Alabama the following thirty-eight counties have no hospitals for community use: Baldwin, Bibb, Blount, Bullock, Chambers, Cherokee, Chilton, Choctaw, Clarke, Clay, Cleburne, Coffee, Conecuh, Coosa, Crenshaw, Cullman, Dale, DeKalb, Fayette, Franklin, Geneva, Greene, Hale, Henry, Lamar, Lawrence, Limestone, Lowndes, Marion, Marshall, Monroe, Perry, Pickens, Russell, Shelby, Sumter, Washington, Wilcox.

ARIZONA

	Total Beds	Av. Beds in Use
Ajo, 50—Pima		
New Cornelia Copper Co. Hosp.	35	30
Bisbee, 9,205—Cochise		
Calumet and Arizona Hospital	50	30
Copper Queen Hospital	50	25
Clifton, 4,164—Greenlee		
Phelps-Dodge Hospital	10	1
Indian Wells, 26—Navajo		
Good Samaritan Hospital	14	4
Jerome, 2,393—Yavapai		
United Verde Hospital	50	30
Kingman, 855—Mohave		
Mohave County Hospital	30	12
Mesa, 3,036—Maricopa		
South Side District Hospital	36	12
Miami, 6,689—Gila		
Miami-Inspiration Hospital	40	27
Morenci, 5,100—Greenlee		
Phelps-Dodge Hospital	18	6
Nogales, 5,199—Santa Cruz		
Dr. Chenoweth's Private Hosp.	10	7
St. Joseph's Hospital	18	4
Phoenix, 38,669—Maricopa		
Arizona Deaconess Hospital	97	50
Booker T. Washington Memorial Hospital and Sanatorium	20	8
Helen Lee Sanatorium (T.B.)	14	10
Maricopa Co. Tuberculosis Hosp.	38	25
Park View Sanatorium (T.B.)	28	20
The Phoenix Sanatorium (T.B.)	80	40
Rest Haven Sanit. (N.& M.)	17	12
St. Joseph's Hospital	120	78
St. Luke's Hospital (T.B.)	65	45
Valley View Sanatorium	14	8
Williams Mesquite Camp (T.B.)	35	12



Total hospitals in Arizona, 83; for community use, 47; population per hospital bed, 251; percentage of beds occupied, 59; percentage of counties without hospitals, 7.2.

	Total Beds	Av. Beds in Use
Douglas, 9,916—Cochise		
Calumet Hospital	25	12
Cochise County Hospital	40	30
Flagstaff, 3,186—Coconino		
Coconino County Hospital	24	12
Mercy Hospital	10	4
Florence, 161—Pinal		
Pinal County Hospital	20	10
Ft. Defiance, 150—Apache		
Hospital of the Good Shepherd	35	25
Ganado, 100—Apache		
Ganado Mission Presbyterian Hospital	24	15
Globe, 7,044—Gila		
Gila County Hospital	52	32
Old Dominion Hospital	15	10
Hayden, 582—Gila		
Hayden Hospital	12	6
Prescott, 4,380—Yavapai		
Mercy Hospital	36	16
Pamsetgaaf Sanatorium (T.B.)	26	18
Prescott Pines Sanat. (T.B.)	25	6
St. Luke's in the Mountains (T.B.)	48	45
Yavapai County Hospital	50	30
Ray, 25—Pinal		
Ray Hospital	16	7
Tucson, 26,733—Pima		
Hillcrest Sanatorium (T.B.)	22	15
Pima County Hospital	28	24
St. Luke's in-the-Desert Sanitarium (T.B.)	31	30
St. Mary's Hospital and Sanat.	84	65
Tucson General Hospital	60	38
Tucson Tubercular Charity Hospital	20	12
Williams, 1,350—Coconino		
Williams Hospital	12	2
Yuma, 4,237—Yuma		
Yuma General Hospital	20	12
Total for community use, 47	1,624	972

In Arizona the following county has no hospital for community use: Graham.

ARKANSAS

	Total Beds	Av. Beds in Use
Arkadelphia, 3,311—Clark		
Moore & Wallis Sanitarium	10	4
The Townsend Sanitarium	10	3
Batesville, 4,299—Independence		
Dorr, Gray, Johnston & Craig Sanitarium	15	5
Blytheville, 6,447—Mississippi		
Blytheville General Hospital	33	21
Camden, 3,238—Ouachita		
Camden Hospital	20	7
Charleston, 734—Franklin		
Bollinger Hospital	10	5
Conway, 4,564—Faulkner		
Faulkner County Hospital	30	15
Crossett, 2,038—Ashley		
Crossett Hospital	26	18
DeQueen, 2,517—Sevier		
DeQueen Hospital	12	6
Eldorado, 3,887—Union		
El Dorado General Hospital	30	20
Warner-Brown Hospital	85	56
Eureka Springs, 3,228—Carroll		
Huntington Hospital	10	4
Fayetteville, 5,362—Washington		
Fayetteville City Hospital	50	30
Ft. Smith, 31,643—Sebastian		
Sebastian County Hospital	75	75
Sparks' Memorial Hospital	100	50
St. Edward's Mercy Hospital	75	25
St. John's Hospital	53	26
Helena, 9,112—Phillips		
Helena Hospital	35	18
Hope, 3,639—Hempstead		
Josephine Hospital	20	5
Julia Chester Hospital	12	6
Hot Springs National Park, 11,695—Garland		
Leo N. Levi Memorial Hospital	60	40
Modern Hospital	20	10
New Park Sanitarium	16	8
Ozark Sanatorium	60	35
St. Joseph's Infirmary	88	58
Jonesboro, 9,384—Craighead		
St. Bernard's Hospital	102	38
Lake Village, 1,449—Chicot		
South East Arkansas Hospital	30	12
Little Rock, 74,216—Pulaski		
Baptist State Hospital	325	90
J. E. Bush Memorial Hospital	48	23
Little Rock General Hospital	100	62
Missouri Pacific Hospital	135	52
Pettus Surgical Infirmary	10	4
Pulaski County Hospital	200	180
Royal Circle Hosp. (Colored)	50	12
St. Vincent's Infirmary ★	135	95
Trinity Hospital	44	18
United Friends Hosp. (Colored)	25	15
Morrilton, 3,010—Conway		
St. Anthony's Hospital	12	6
Newport, 3,771—Jackson		
Elton-Matthews Sanitarium	12	5
Paragould, 6,306—Greene		
Dickson Memorial Sanitarium	22	13
Paris, 1,740—Logan		
Paris Hospital	35	13
Pine Bluff, 21,611—Jefferson		
Davis Baptist Hospital	55	24
Prescott, 2,691—Nevada		
Cora Donnell Hospital	30	21
Ratcliff, 257—Logan		
Ratcliff Clinic and Hospital	20	4
Rogers, 3,318—Benton		
Dr. Love's Sanitarium	10	3
Russellville, 4,505—Pope		
City Hospital	12	3
St. Mary's Hospital	35	18
Siloam Springs, 2,569—Benton		
City Hospital	12	4
Siloam Springs Hospital	12	12
Texarkana, 8,257—Miller		
Michael Meagher Memorial Hospital	75	45
St. Louis Southwestern Hospital	152	52
One General Hospital of less than 10 beds	7	3
Total for community use, 52	2,660	1,377

In Arkansas the following forty-seven counties have no hospitals for community use: Arkansas, Baxter, Boone, Bradley, Calhoun, Clay, Cleburne, Cleveland, Columbia, Conway, Crittenden, Cross, Dallas, Desha, Fulton, Grant, Hot Spring, Howard, Izard, Johnson, Lafayette, Lawrence, Lee, Lincoln, Little River, Lonoke, Madison, Marion, Monroe, Montgomery, Newton, Perry, Pike, Poinsett, Polk, Prairie, Randolph, St. Francis, Saline, Scott, Searcy, Sharp, Stone, Van Buren, White, Woodruff, Yell.

CALIFORNIA

	Total Beds	Av. Beds in Use
Ahwahnee, —— —Madera		
Ahwahnee Tri-Co. Tuberculosis Sanatorium	108	76
Alameda, 31,876—Alameda		
Alameda Sanit. on South Shore.	90	32
Alhambra, 9,096—Los Angeles		
Alhambra Hospital	50	30
Alpine, —— —San Diego		
The Alpine Sanat., Inc. (T.B.).	60	34
Alta, 113—Placer		
Alta Sanatorium (T.B.)	25	12
Altadena, —— —Los Angeles		
Echo Mountain Rest Home (T.B.)	12	8
Alturas, 979—Modoc		
Modoc County Hospital	10	5
Anaheim, 5,526—Orange		
Anaheim Sanitarium, Inc.	40	20
Arcata, 1,121—Humboldt		
Trinity Hospital	20	18
Arlington, 1,550—Riverside		
Riverside County Hospital	135	110
Artesia, 500—Los Angeles		
Artesia Hospital	20	10
Atascadero, —— —San Luis Obispo		
Wm. H. Lewis Memorial Hosp.	20	* 6
Brawley, 5,392—Imperial		
Brawley Hospital	28	8
Burbank, 400—Los Angeles		
Burbank Hospital	50	14
Byron Hot Springs, 30—Contra Costa		
Byron Hot Springs Sanitarium	20	10
Chico, 8,872—Butte		
Chico Sanatorium	34	22
Enloe Hospital	35	24
Sisters' Hospital	30	14
Chula Vista, 1,718—San Diego		
McNabb Hosp. and Sanitarium.	30	16
Cloverdale, 823—Sonoma		
Cloverdale Hospital	20	5
Clovis, 1,157—Fresno		
McMurtry Sanitarium	11	5
Coalinga, 2,934—Fresno		
San Joaquin Hospital	15	8
Colfax, 615—Placer		
The Brown Convalescent Home (T.B.)	17	12
Bushnell Sanatorium (T.B.)	20	20
Colfax Hospital (T.B.)	60	40
Colfax School for the Tuberculous	180	140
Kathramon Sanatorium (T.B.)	20	17
Colusa, 1,846—Colusa		
Colusa County Hospital	30	30
Colusa Hospital	12	6
Compton, —— —Los Angeles		
Compton Sanit., Inc. (N.& M.).	165	89
Corona, 3,540—Riverside		
Corona Hospital	12	6
Covina, 1,652—Los Angeles		
Covina Hospital	22	11
Culver City, —— —Los Angeles		
Culver City Hospital	15	6
Tapley Sanitarium (N.& M.)	15	15
Dinuba, 3,400—Tulare		
Dinuba Sanitarium	15	10
Dorris, 214—Siskiyou		
Dorris Hospital	20	8
Downey, 1,500—Los Angeles		
Downey Hospital	12	6
Downieville, 500—Sierra		
Sierra County Hospital	20	8
Duarte, 650—Los Angeles		
Palm Grove Sanit. (N.& M.).	35	25
Dunsmuir, 1,719—Siskiyou		
Dunsmuir Hosp. and Sanitarium.	20	10
El Centro, 5,464—Imperial		
El Centro Hospital, Inc.	36	20
Eureka, 13,533—Humboldt		
Humboldt County Hospital	150	120
Humboldt Co. School for the Tuberculous	53	49
Sequoia Hospital	45	20
St. Joseph's Hospital	60	35
Union Labor Hospital	40	21
Exeter, 1,852—Tulare		
Exeter Sanitarium	12	6
Ferndale, 905—Humboldt		
Ferndale General Hospital	13	6
French Camp, 233—San Joaquin		
San Joaquin General Hospital	341	283
Fresno, 58,485—Fresno		
Burnett Sanitarium	150	72
General Hosp. of Fresno Co.*	300	296
Sample Sanitarium	28	18
Ft. Bragg, 2,408—Mendocino		
Redwood Coast Hospital, Inc.	25	12
Fullerton, 1,725—Orange		
Fullerton Hospital	20	12
Gilroy, 2,437—Santa Clara		
Gilroy Private Hospital	14	9
Glendale, 21,290—Los Angeles		
Arbor Rest Home Sanitarium	30	17
Glendale Research Hospital	40	19
Glendale Sanitarium and Hosp.	190	152
Windsor Hospital	41	20
Grass Valley, 4,006—Nevada		
W. C. Jones Memorial Hospital	20	10
Groveland, 250—Tuolumne		
Hetch Hetchy Hospital	35	5
Halcyon, —— —San Luis Obispo		
Halcyon Sanatorium	12	5
Hanford, 4,829—Kings		
Hanford Sanitarium, Inc.	30	9
Kings County Hospital	90	40
Sacred Heart Hospital	25	12
Hayward, 3,437—Alameda		
Hayward General Hospital	15	10
Healdsburg, 2,011—Sonoma		
Healdsburg General Hospital	12	4
Hermosa Beach, 679—Los Angeles		
Hermosa-Redondo Hospital	25	13
Hobart Mills, —— —Nevada		
Hobart Estate Company Hosp.	14	3
Hollister, 2,308—San Benito		
Hazel Hawkins Memorial Hosp.	15	5
San Benito County Hospital	25	12
Hollywood, —— —Los Angeles		
Benedict Maternity Hospital	22	10
Huntington Park, 4,513—Los Angeles		
Mission Hospital	30	15
Inglewood, 1,536—Los Angeles		
Inglewood Hospital	14	8
Keene, —— —Kern		
Stoney Brook Retreat (T.B.)	50	43
La Jolla, —— —San Diego		
Scripps Memorial Hospital	50	14
Scripps Metabolic Clinic	25	15
Lamanda Park, 250—Los Angeles		
Doctor Keaster's Private Hosp.	16	10
LaVina, —— —Los Angeles		
LaVina Sanatorium (T.B.)	100	56
Lincoln, 1,402—Placer		
Joslin's Sanatorium	15	10
Livermore, 1,916—Alameda		
Arroyo Sanatorium (T.B.)	180	179
Del Valle Farm (T.B.)	48	48
Livermore Sanitarium (N.& M.).	85	75
Lodi, 4,850—San Joaquin		
Dr. Buchanan's Sanitarium	12	5
Mason Hospital	16	8
Loma Linda, —— —San Bernardine		
Loma Linda Sanit. and Hosp.*	155	123
Long Beach, 91,182—Los Angeles		
Long Beach Community Hosp.	107	40
Seaside Hospital *	150	135
St. Mary's Long Beach Hospital.	60	40
Los Angeles, 576,673—Los Angeles		
Angelus Hospital Association	130	110
Arroyo-Croft Sanitarium	30	6
Banksia Place Sanit. (N.& M.).	15	13
The Barlow Sanatorium (T.B.).	85	79
Belvedere Sanitarium (T.B.)	24	16
Bonnie Brae Sanit. and Hosp.	25	10
California Lutheran Hospital *.	195	173
Chase Diet Sanitarium	22	17
Children's Hospital	100	85
Clara Barton Hospital	94	78
Dunbar Hospital	20	4
Eye and Ear Hospital of Los Angeles	12	6
Fernwold Sanitarium (N.& M.).	20	12
Golden State Hospital	130	102
Harriet G. Cunningham's Hosp.	31	26
Hollywood Hospital *.	139	88
Hospital of the Good Samaritan, Inc.	140	130
Hyde Park Hospital	15	10
Kaspare Cohn Hospital	55	51
Lincoln Hospital	35	30
Los Angeles General Hospital *	1,249	1,098
Los Angeles Receiving Hospital.	17	5
Los Angeles Sanitarium	20	12
Los Angeles Smallpox Quarantine Hospital	80	26
Maternity Cottage	30	18
Methodist Hospital of Southern California *	225	100
New French Hospital	45	40
Orthopaedic Hospital	60	57
Auburn, 2,376—Placer		
Macbeth Sanitarium	13	10
Placer County Hospital	120	85
Avalon, 850—Los Angeles		
Catalina Hospital	12	4
Bakersfield, 23,487—Kern		
Kern General Hospital	130	115
Mercy Hospital	60	37
R. B. Rees Hospital	12	12
Victory Hospital	21	9
Banning, 1,810—Riverside		
Banning Hosp. & Sanat. (T.B.)	30	22
Mary Henderson Sanit. (T.B.).	26	24
Southern Sierras Sanat. (T.B.).	30	15
Belmont, 363—San Mateo		
Alexander Sanit., Inc. (N.& M.)	35	25
California Sanatorium (T.B.).	120	100
Charles S. Howard Foundation (T.B.)	20	14
Nerve Rest Sanit. (N.& M.)	25	15
Beresford (Belmont, P.O.), —— —San Mateo		
Community Hosp. of San Mateo County	66	36
Berkeley, 66,209—Alameda		
Albert H. Rowe Sanitarium	10	3
Alta Bates Sanatorium	40	32
Berkeley General Hospital	100	75
El Reposo Sanit. and Hospital.	45	35

● Hospital for community use.
✚ Tuberculosis Hospital.
▲ Nervous and Mental Hospital.
○ ✚ △ Established since 1920.

Total hospitals in Arkansas, 70; for community use, 52; population per hospital bed, 696; percentage of beds occupied, 51; percentage of counties without hospitals, 62.6.

	Total Beds	Av. Beds in Use
Pacific Hospital	79	77
Resthaven (N.& M.)	32	30
Rice's Maternity Home	14	12
Roosevelt Hospital	77	53
Rosena Rest Retreat (N.& M.)	15	12
Santa Fe Coast Lines Hospital	131	73
St. Vincent's Hospital *	110	72
Talbot Sanitarium (N.& M.)	13	12
Terry Sanitarium	14	5
White Memorial Hospital *	108	94
Wilshire Rest Home	18	12
Women's Alliance Maternity Cottage	28	20
Los Gatos, —— —Santa Clara		
Oak's Sanitarium (T.B.)	60	52
Madera, 3,444—Madera		
Madera County Hospital	50	30
Madera Sanitarium	18	12
Manor, —— —Marin		
Arequipa Sanatorium (T.B.)	42	40
Martinez, 2,115—Contra Costa		
Contra Costa County Hospital	125	82
Marysville, 5,461—Yuba		
Rideout Memorial Hospital	35	20
Yuba County Hospital	78	43

CALIFORNIA

● Hospital for community use.
✚ Tuberculosis Hospital.
▲ Nervous and Mental Hospital.
○ ✚ △ Established since 1920.

Total hospitals in California, 490; for community use, 368; population per hospital bed, 174; percentage of beds occupied, 70; percentage of counties without hospitals, 10.3.

	Total Beds	Av. Beds in Use
Montrose, 45—Los Angeles		
Dr. Utley's Hospital-Sanitarium	25	18
Mountain View, 1,161—Santa Clara		
Mountain View Hosp. and Sanit.	15	3
Napa, 6,757—Napa		
Francis Hospital & Sanatorium	20	15
Napa General Hospital	12	6
National City, 1,733—San Diego		
Elwyn Sanitarium	12	6
Paradise Valley Sanitarium and Hospital	135	60
Nevada City, 1,782—Nevada		
Nevada County Hospital	65	50
Newman, 1,251—Stanislaus		
Newman Hospital	10	5
Oakdale, 1,745—Stanislaus		
Oakdale Hospital	14	4
Oakland, 253,700—Alameda		
Alameda Co. Receiving Hosp.	11	5
Anderson's Sanat. (N.& M.)	20	18
Baby Hospital Association	30	30
East Bay Hospital	35	15
Fabiola Hospital Association *	150	140
Inez Sanitarium	10	4
Oakland Central Hospital	60	45
Oakland Maternity Hospital	14	13
Providence Hospital *	100	95
Samuel Merritt Hospital *	118	102
St. Anthony's Hospital	67	58
Olive View, —— —Los Angeles		
Olive View Sanatorium (T.B.)	323	297
Orange, 2,920—Orange		
Orange County Hospital	125	90
Oroville, 3,340—Butte		
Oroville Curran Hospital	50	20
Oxnard, 2,555—Ventura		
St. John's Hospital	40	15
Palms, 150—Los Angeles		
Health School of Dr. Geo. S. Weger	30	20
Palm Springs, 150—Riverside		
Las Solanitas (T.B.)	38	20
Palo Alto, 5,900—Santa Clara		
Palo Alto Hospital	35	23

	Total Beds	Av. Beds in Use
McCloud, 200—Siskiyou		
McCloud Hospital	30	16
Merced, 3,974—Merced		
Merced County Hospital	100	80
Mercy Hospital	25	16
Merced Falls, 50—Merced		
Jos. Banos Hospital	11	5
Yosemite Hospital	14	5
Modesto, 9,241—Stanislaus		
McPheeter's Hospital	18	12
Robertson Hospital	45	25
St. Mary's Hospital	21	10
Stanislaus County Hospital	100	64
Monrovia, 5,480—Los Angeles		
The Monrovia Clinic (T.B.)	60	40
The Monrovia Sanatorium (T.B.)	15	7
Our Lady of Lourdes Rest Home (T.B.)	14	8
Pottenger Sanat. for Diseases of the Lungs and Throat (T.B.)	134	120
Monterey, 5,479—Monterey		
El Adobe Hospital	22	15
Monterey Peninsula Hospital	15	10

	Total Beds	Av. Beds in Use
Paradise, 90—Butte		
Paradise Sanatorium (T.B.)	22	22
Pasadena, 56,732—Los Angeles		
El Nido Pasadena Preventorium	53	19
Las Encinas	63	44
Pasadena Hospital Association	200	128
Petaluma, 6,226—Sonoma		
Petaluma General Hospital	26	12
Placerville, 1,914—El Dorado		
El Dorado County Hospital	70	35
Placerville Sanatorium	20	10
Pomona, 15,372—Los Angeles		
Pomona Valley Hospital	40	25
Porterville, 4,097—Tulare		
Porterville Hospital and Maternity Home	10	4
Portola, 100—Plumas		
Western Pacific Railway Hosp.	20	14
Quincy, 519—Plumas		
Plumas Industrial Hospital	10	5
Randsburg, 1,000—Kern		
Rand District Hospital	10	5

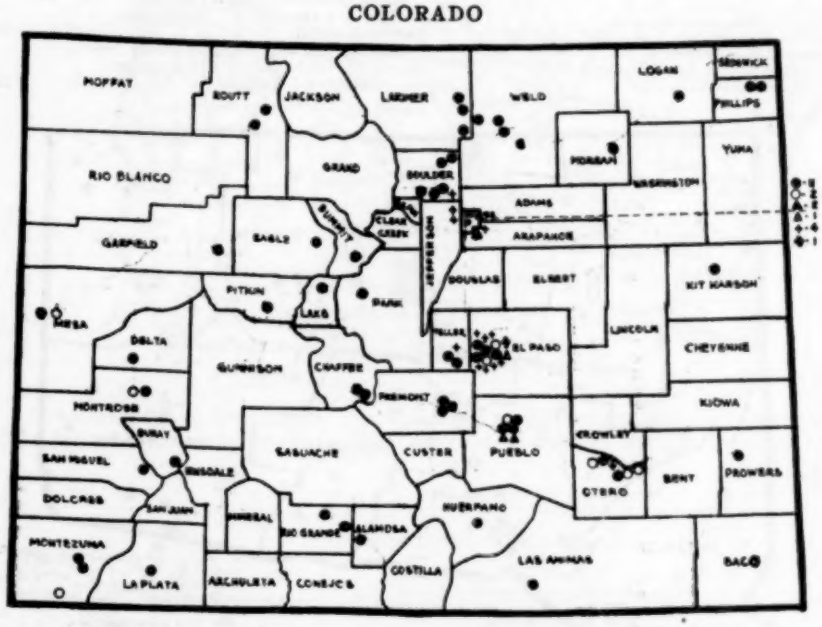
	Total Beds	Av. Beds in Use
Red Bluff, 3,530—Tehama		
St. Elizabeth's Mercy Hospital	20	10
Tehama County Hospital	65	35
Redding, 2,912—Shasta		
Shasta County Hospital	25	9
St. Caroline Sanitarium	24	14
Redlands, 9,571—San Bernardino		
Redlands Heights Sanatorium	20	12
Redwood City, 2,442—San Mateo		
Canyon Sanatorium (T.B.)	70	52
Drexler Hall	13	12
Richmond, 22,530—Contra Costa		
Cottage Hospital	20	12
Grand Vista Sanat. (N.& M.)	20	10
Richmond Maternity Hospital	11	5
Ripon, 200—San Joaquin		
Ripon Hospital	17	10
Rosemead (El Monte P.O.), —— —Los Angeles		
Alhambra Sanat., Inc. (N.& M.)	18	7
Ross, 556—Marin		
Ross General Hospital	50	18
Sacramento, 72,260—Sacramento		
Igo-Flitcroft Hospital	14	10
Krull Hospital	30	20
Mater Misericordiae Hospital	150	85
Sacramento Hospital	500	400
Sutter Hospital	174	93
Salinas, 3,736—Monterey		
Jim Bardin Hospital	30	26
Monterey County Hospital	25	14
Salinas Valley Hospital	14	10
San Bernardino, 22,823—San Bernardino		
Ramona Hospital	50	28
San Bernardino County Hosp.*	212	165
Sequoia Hospital	15	10
San Diego, 106,047—San Diego		
Burlingame Hospital	18	6
Glenwood Maternity Sanitarium	14	8
Mercy Hospital	175	125
Mission Valley Hospital	36	15
San Diego Co. General Hosp.*	275	263
San Diego Municipal Isolation Hospital	60	1
Sunshine General Hospital	14	8
San Fernando, 1,000—Los Angeles		
San Fernando Hospital	12	7
San Francisco, 557,530—San Francisco		
Chinese Hospital	54	20
Dante Sanatorium	56	40
Franklin Hospital *	210	157
French Hospital *	220	160
Hahnemann Hospital of the University of California *	112	75
Hospital for Children *	245	175
Lane Hospital *	181	130
Mary's Help Hospital *	130	120
Molony Urological Hospital	10	6
Mt. Zion Hospital *	150	104
Park Sanitarium Association (N.& M.)	33	20
Park West Hydro and Sanatorium (N.& M.)	20	20
Physicians and Surgeons Institute of Physiotherapy	25	15
San Francisco Emergency Hosp.	90	50
San Francisco Hospital *	1,072	667
San Francisco Polyclinic and Post Graduate College	12	9
Shriners' Hospital for Crippled Children	50	47
Southern Pacific General Hosp.*	300	265
St. Elizabeth's Infant Hospital	64	50
St. Francis Hospital †	325	280
St. Joseph's Hospital *	200	165
St. Luke's Hospital *	188	140
St. Mary's Hospital *	200	180
Stanford University Hospital *	255	194
Union Plant Hospital	24	9
University of California Hosp.*	255	194
Wakefield Hospital	40	20
Sanitarium, 25—Napa		
St. Helena Sanit. and Hospital	135	81
San Jose, 43,551—Santa Clara		
Alum Rock Sanatorium (T.B.)	20	18
O'Connor Sanitarium	80	40
San Jose Hospital	90	63
Santa Clara County Hospital	288	262
Sunnyholme Preventorium	17	16
San Leandro, 5,903—Alameda		
Alameda County Hospital and Infirmary *	192	150
San Luis Obispo, 5,895—San Luis Obispo		
Pacific Hospital	16	14
San Luis Obispo County Hosp.	60	50
San Luis Sanitarium	20	15
San Mateo, 5,779—San Mateo		
Mills Memorial Hospital	60	30
San Mateo Preventorium	12	12
San Pedro, 3,500—Los Angeles		
San Pedro General Hospital	85	30
San Rafael, 5,512—Marin		
Cal-Pine Sanitarium	10	5
Helios Sun Sanitarium	16	8
Marin Co. Tuberculosis Hosp.	10	6
San Rafael Cottage Hospital	30	15
Santa Ana, 19,481—Orange		
Santa Ana Valley Hospital	41	30
Santa Barbara, 24,038—Santa Barbara		
Santa Barbara Cottage Hosp.*	125	73
Santa Barbara General Hospital	123	88
St. Francis Hospital *	68 (a)	35

	Total Beds	Av. Beds in Use
Santa Cruz, 10,917—Santa Cruz		
Hanly Hospital	36	25
Mission Hospital and Sanitarium	24	12
Santa Cruz County Hospital	12	6
Seabright Sanitarium	12	8
Santa Maria, 3,943—Santa Barbara		
Lucas Sanitarium	12	5
Santa Monica, 19,445—Los Angeles		
Loamshier Hospital	35	18
Santa Monica Sanitarium	30	20
St. Catherine's Hospital and Annex	75	15
Santa Paula, 2,216—Ventura		
Santa Paula Cottage Hospital	10	5
Santa Rosa, 7,817—Sonoma		
General Hospital	40	24
Mary Jesse Hospital	19	9
Sonoma County Hospital	60	50
Scotia, 1,500—Humboldt		
Scotia Hospital Association, Inc.	42	20
Selma, 3,158—Fresno		
Selma Sanitarium, Inc.	14	6
Sierra Madre, 2,026—Los Angeles		
Sierra Madre Hospital	14	6
Sonora, 2,029—Tuolumne		
Bromley Sanatorium	15	9
Sierra Hospital	15	5
Tuolumne County Hospital	54	25
South Gate, 57—Los Angeles		
Suburban Hospital	52	15
South Pasadena, 7,648—Los Angeles		
Pasadena Sanitarium (N.& M.)	100	100
South San Francisco, 1,989—San Mateo		
South San Francisco Hospital	36	14
Springville, —— —Tulare		
Tulare Kings County Joint Tubercular Hospital	93	70
St. Helena, 1,603—Napa		
St. Gothard's General Hospital	27	8
Standard, 813—Tuolumne		
Standard Hospital	29	New
Stanford University, 700—Santa Clara		
Stanford Convalescent Home	40	36
Stockton, 47,287—San Joaquin		
Clark's Sanatorium (N.& M.)	75	60
Dameron Hospital	50	44
St. Joseph's Hospital	85	75
Sugar Pine, 60—Madera		
Sugar Pine Hospital	14	3
Suisun City, 769—Solano		
Solano County Hospital	72	48
Susanville, 918—Lassen		
Lassen County Hospital	18	10
Riverside Hospital	50	30
Taft, 3,317—Kern		
West Side Hospital	40	20
Torrance, —— —Los Angeles		
Jared Sidney Torrance Memorial Hospital	35	20
Tulare, 3,539—Tulare		
Tulare Hospital	10	6
Turlock, 1,573—Stanislaus		
Emanuel Hospital	40	15
Lillian Collins Hospital	16	7
Ukiah, 2,136—Mendocino		
Langland Hospital	15	5
Mendocino County Hospital	75	65
Upland, 2,902—San Bernardino		
San Antonio Community Hosp.	40	14
Ventura, 2,945—Ventura		
Big Sisters Hospital	30	15
Ventura County Hospital	72	52
Vineburg, —— —Sonoma		
Burndale Sanitarium	10	5
Visalia, 5,753—Tulare		
Kaweah Hospital, Inc.	30	13
Tulare County Hospital	35	30
Watsonville, 4,446—Santa Cruz		
Watsonville Hospital	22	16
Weaverville, 1,100—Trinity		
Trinity County Hospital	30	15
Weed, 400—Siskiyou		
Weed Hospital	21	12
Weimar, —— —Placer		
Weimar Joint Sanatorium (T.B.)	284	215
West Los Angeles, —— —Los Angeles		
Brentwood Court	15	10
Westwood, —— —Lassen		
Westwood Hospital	100	65
Willows, 1,139—Glenn		
Glen County Hospital	31	16
The Willows Sanatorium	12	5
Woodland, 3,187—Yolo		
Woodland Sanitarium	54	46
Yolo County Hospital	60	35
Yreka, 1,134—Siskiyou		
Siskiyou County Hospital	40	25
Yuba City, 1,160—Sutter		
Emergency Hospital	10	7
Sutter County Hospital	48	25
Twenty-one General Hospitals of less than 10 beds	153	83
Total for community use, 368	22,994	16,218

In California the following six counties have no hospitals for community use: Alpine, Calaveras, Del Norte, Inyo, Lake, Mono.

COLORADO

	Total Beds	Av. Beds in Use
Alamosa, 317—Alamosa		
Alamosa Hospital	25	15
Aspen, 1,265—Pitkin		
Citizens Hospital	15	15
Boulder, 11,837—Boulder		
Boulder-Colorado Sanitarium	100	41
Boulder County Hospital (T.B.)	25	15
Community Hospital	75	30
Mesa Vista Sanatorium (T.B.)	26	16
Brush, 2,103—Morgan		
Eben-Ezer Mercy Inst.	18	8
Burlington, 368—Kit Carson		
Burlington Hospital	12	3
Canon City, 4,551—Fremont		
Dr. Graves' Private Hospital	35	14
The Holmes Hospital	25	12
Colorado Springs, 30,105—El Paso		
Beth-El General Hospital	104	74
Bonnie View Sanatorium (T.B.)	25	18
Colorado Springs Psychopathic Hospital	40	30
Cragmor Sanatorium (T.B.)	105	93
Crestone Heights Sanitarium	21	7
Glockner Sanatorium and Hosp.	210	140
Idlewold Sanatorium (T.B.)	12	5
Observation Hospital	25	15
St. Francis Hospital ★	150	80
Star Ranch In-the-Pines Sanat.	30	25
Sunnyrest Sanatorium (T.B.)	50	45
Ft. Collins, 8,755—Larimer		
Fort Collins Hospital	23	19
Larimer County Hospital	27	12
Glenwood Springs, 2,073—Garfield		
Glenwood Springs Sanitarium	25	14
Grand Junction, 8,665—Mesa		
St. Mary's Hospital	65	50
Greeley, 12,531—Weld		
Greeley Hospital	60	25
Weld County Hospital	62	40
Haxtun, 1,118—Phillips		
Haxtun Sanatorium	10	5
Holyoke, 1,205—Phillips		
Holyoke Hospital	10	5
La Junta, 4,154—Otero		
A. T. & S. F. R. R. Hospital	36	23
City Hospital	30	17
The Mennonite Sanit. (T.B.)	40	25
Lamar, 2,512—Prowers		
Lamar Hospital	13	8
Leadville, 4,959—Lake		
St. Vincent's Hospital	27	8
Littleton, 1,636—Arapahoe		
Physicians' and Surgeons' Hosp.	25	18
Longmont, 4,256—Boulder		
Longmont Hospital Association	50	18
St. Vrain Hospital	10	6
Loveland, 3,651—Larimer		
The Loveland Hospital	20	10



COLORADO

● Hospital for community use.
✚ Tuberculosis Hospital.
▲ Nervous and Mental Hospital.
○ ✣ △ Established since 1920.

Total hospitals in Colorado, 124; for community use, 89; population per hospital bed, 209; percentage of beds occupied, 63; percentage of counties without hospitals, 46.0.

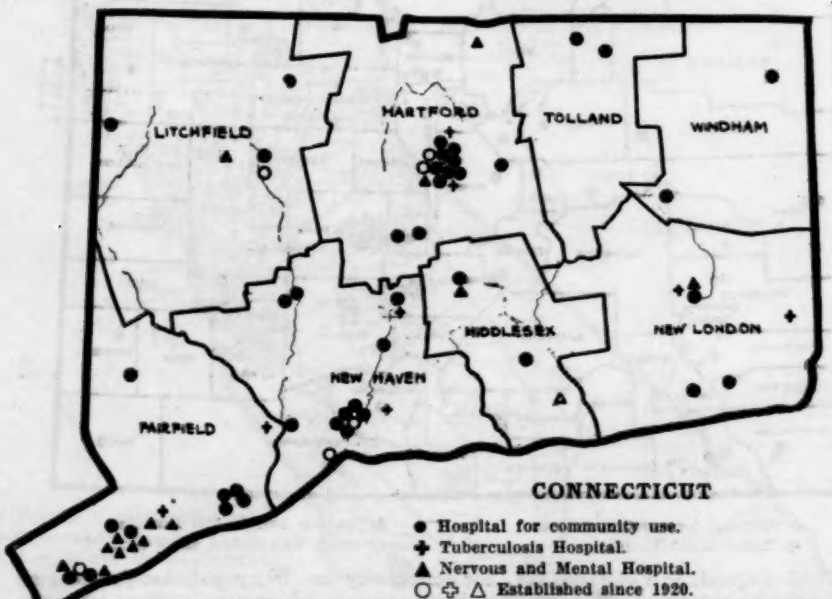
	Total Beds	Av. Beds in Use
Cortez, 565—Montezuma		
The Johnson Hospital	10	7
Cripple Creek, 2,325—Teller		
Cripple Creek Hospital	25	14
Teller County Hospital	28	15
Del Norte, 840—Rio Grande		
St. Joseph's Sanitarium	14	7
Delta, 2,623—Delta		
Western Slope Memorial Hosp.	13	7
Denver, 280,911—Denver		
Agnes Memorial Sanat. (T.B.)	157	143
Bethesda Sanatorium (T.B.)	60	40
Beth Israel Hospital	50	23
Children's Hospital ★	117	78
Church Home for Convalescents.	25	15
Colorado General Hospital ★	148	76
Denver General Hospital ★	325	288
The Good Samaritan Sanitarium	25	20
Mercy Hospital ★	160	140
Mt. Airy Hospital (N.& M.)	40	30
Park Avenue Hospital	50	30
St. Anthony's Hospital ★	200	160
St. Joseph's Hospital ★	300	143
St. Luke's Hospital ★	200	180
Steele Memorial Hospital	80	52
Sunnyrest Sanitarium (T.B.)	32	20
U. S. Grant Hospital	25	15
Durango, 4,116—La Plata		
Mercy Hospital	30	25
Englewood, 4,356—Arapahoe		
Molkery Sanitarium (N.& M.)	15	8
Fruita, 1,193—Mesa		
Fruita Community Hospital	18	10
Manitou, 1,099—El Paso		
Montcalm Sanatorium (T.B.)	50	40
Montrose, 3,581—Montrose		
Montrose Hospital	12	7
St. Luke's Hospital	15	2
Ouray, 1,165—Ouray		
The Bates Hospital	25	8
Cougar Sanatorium	10	4
Pueblo, 43,787—Pueblo		
Minnequa Hospital	225	128
Parkview Hospital	40	31
St. Mary Hospital	150	90
Woodcroft Hospital (N.& M.)	80	75
Rocky Ford, 3,746—Otero		
Physicians' Hospital	10	6
Salida, 4,689—Chaffee		
Denver and Rio Grande Western Railroad Hospital	50	28
Red Cross Hospital	50	26
Steamboat Springs, 1,249—Routt		
Steamboat Springs Hospital	10	4
Sterling, 6,415—Logan		
Sterling Hospital	25	16
Telluride, 1,618—San Miguel		
Telluride Hospital	32	18
Trinidad, 11,019—Las Animas		
Mt. San Rafael Hospital	75	45
Victor, 1,777—Teller		
District Hospital	18	11
Walsenburg, 2,423—Huerfano		
Lamme Brothers Hospital	20	10
Wheat Ridge, —— —Jefferson		
Evangelical Lutheran Sanitarium (T.B.)	95	64

	Total Beds	Av. Beds in Use
Windsor, 935—Weld		
The Bartz Memorial Hospital...	10	4
Windsor Hospital	14	4
Five General Hospitals of less than 10 beds.....	37	17
Total for community use, 89.....	4,861	3,188

In Colorado the following twenty-nine counties have no hospitals for community use: Adams, Archuleta, Baca, Bent, Chaffee, Cheyenne, Clear Creek, Conejos, Costilla, Crowley, Custer, Dolores, Douglas, Elbert, Gilpin, Grand, Gunnison, Hinsdale, Jackson, Kiowa, Lincoln, Mineral, Moffat, Rio Blanco, Saguache, San Juan, Sedgwick, Washington, Yuma.

CONNECTICUT

	Total Beds	Av. Beds in Use
Bridgeport, 143,555—Fairfield		
Bridgeport Hospital ★.....	289	185
Englewood Hospital	100	35
Hillside Home and Hospital (N.& M.)	140	120
Park City Hospital.....	45	15
St. Vincent's Hospital ★.....	236	170
Bristol, 24,652—Hartford		
Bristol Hospital	83	22
Cromwell, 2,188—Middlesex		
Cromwell Hall, Inc.....	25	24
Danbury, 18,943—Fairfield		
Danbury Hospital	125	62
Derby, 12,509—New Haven		
Griffin Hospital	80	47
Essex, 2,745—Middlesex		
Leonard Home and Sanitarium (N.& M.)	17	10
New Canaan, 1,672—Fairfield		
Dr. Brooks' Sanatorium (T.B.).	24	24
New Haven, 178,927—New Haven		
Grace Hospital ★.....	300	212
Hospital of St. Raphael ★.....	200	170
New Haven Hospital ★ †.....	378	251
Springside Hospital	110	65
Newington, 2,381—Hartford		
Newington Home for Crippled Children	60	47
New London, 29,103—New London		
Home Memorial Hospital.....	50	30
Lawrence and Memorial Hosps..	137	99
Dr. Lena's Hospital.....	17	15
New Milford, 4,781—Litchfield		
New Milford Hospital, Inc.....	25	10
Norwalk, 29,743—Fairfield		
Norwalk General Hospital.....	70	52
Norwich, 23,118—New London		
Wm. W. Backus Hospital.....	90	75
Putnam, 7,711—Windham		
Day-Kimball Hospital	46	34
Rockville, 7,726—Tolland		
Rockville City Hospital.....	16	9
Sharon, 1,585—Litchfield		
Sharon Hospital	20	11
South Manchester, 8,036—Hartford		
Manchester Memorial Hospital..	49	41
South Norwalk, 8,968—Fairfield		
Dr. Wadsworth's Sanitarium (N.& M.)	25	25
Stafford Springs, 3,059—Tolland		
Cyril and Julia C. Johnson Memorial Hospital.....	35	22



CONNECTICUT

● Hospital for community use.
✚ Tuberculosis Hospital.
▲ Nervous and Mental Hospital.
○ ✣ △ Established since 1920.

Total hospitals in Connecticut, 88; for community use, 63; population per hospital bed, 225; percentage of beds occupied, 68; percentage of counties without hospitals, 0.0.

	Total Beds	Av. Beds in Use
Granby, 615—Hartford		
Dr. Pendleton's Sanitarium, Inc.	27	15
Greens Farms, 200—Fairfield		
Dr. McFarland's Hall (N.& M.).	100	100
Greenwich, 25,329—Fairfield		
Blythewood Sanit. (N.& M.)....	100	65
Bowman's Sanat. (N.& M.).....	15	8
Crest View Sanat. (N.& M.)....	25	16
Greenwich Hospital Association.	87	59
Municipal Hospital	50	16
Guilford, 3,001—New Haven		
The Guilford Sanatorium, Inc..	20	7
Hartford, 160,197—Hartford		
Charter Oak Private Hosp., Inc.	14	9
Hartford Hospital ★.....	619	441
Hartford Isolation Hospital	72	30
Hartford Retreat (N.& M.).....	200	162
Mt. Sinai Hospital.....	75	36
Municipal Hospital ★.....	110	76
Niles Street Private Hospital...	20	12
St. Francis Hospital ★.....	500	332
Wildwood Sanatorium (T.B.)...	50	36
Meriden, 36,292—New Haven		
Meriden Hospital	88	55
Middletown, 22,911—Middlesex		
Middlesex Hospital ★.....	126	74
Milford, 13,493—New Haven		
The Milford Hospital, Inc.....	40	15
New Britain, 68,039—Hartford		
New Britain General Hospital ★.	190	130
Stamford, 40,737—Fairfield		
Dr. Barnes Sanitarium (N.& M.)	85	70
The Orchards (N.& M.).....	25	15
The Stamford Hall Co. (N.& M.)	350	220
The Stamford Hospital.....	146	106
Thompsonville, 5,900—Hartford		
Dr. Vail's Sanatorium (N.& M.)	40	28
Torrington, 24,533—Litchfield		
Charlotte Hungerford Hospital..	60	37
Wallingford, 12,010—New Haven		
Gaylord Farm Sanat. (T.B.)...	125	125
Waterbury, 91,715—New Haven		
St. Mary's Hospital ★.....	220	131
Waterbury Hospital ★.....	185	145
West Haven, 12,400—New Haven		
West Haven Surgical and Maternity Hospital	16	10
Westport, 4,259—Fairfield		
Westport Sanitarium (N.& M.).	100	98
Willimantic, 12,952—Windham		
St. Joseph's Hospital.....	45	35
Winsted, 8,248—Litchfield		
Litchfield County Hospital.....	70	39
Woodmont, —— —New Haven		
The Peck Sanatorium.....	12	6
Total for community use, 63.....	6,799	4,641

All counties in Connecticut have hospitals.

DELAWARE

	Total Beds	Av. Beds in Use
Lewes, 2,074—Sussex		
Beebe Hospital of Lewes, Inc...	35	20
Milford, 2,753—Sussex		
Marshall Hospital	30	9
Milford Emergency Hospital....	35	12
Wilmington, 122,049—New Castle		
Delaware Hospital ★	175	100
Homeopathic Hospital Ass'n.....	86	30
Physicians and Surgeons Hosp.	75	38
St. Francis Hospital.....	60	42
St. Michael's Hospital.....	32	17
Total for community use, 8.....	528	268

In Delaware the following county has no hospital for community use: Kent.

DELAWARE

● Hospital for community use.
✚ Tuberculosis Hospital.
▲ Nervous and Mental Hospital.
○ ✣ △ Established since 1920.

Total hospitals in Delaware, 15; for community use, 8; population per hospital bed, 444; percentage of beds occupied, 50; percentage of counties without hospitals, 33.3.

DISTRICT OF COLUMBIA

	Total Beds	Av. Beds in Use
Washington, 497,906		
Carson Sanitarium.....	15	9
Central Dispensary & Emergency Hospital ★.....	160	137
Chevy Chase Sanat. (N.& M.)..	23	20
Children's Hospital.....	150	81
Columbia Hospital for Women ★	132	87
Curtis Private Surgical Sanitarium	20	8
Eastern Dispensary & Casualty Hospital.....	60	38
Episcopal E. E. and T. Hosp...	100	48
Freedmen's Hospital ★.....	278	214
Gallinger Municipal Hospital ★.	365	244
Garfield Memorial Hospital ★..	320	107
Georgetown University Hosp.★.	227	119
George Washington University Hospital ★	100	72
Kendall House Sanitarium.....	22	18
National Homeopathic Hospital.	55	40
Providence Hospital ★.....	310	275
Sibley Memorial Hospital ★....	108	103

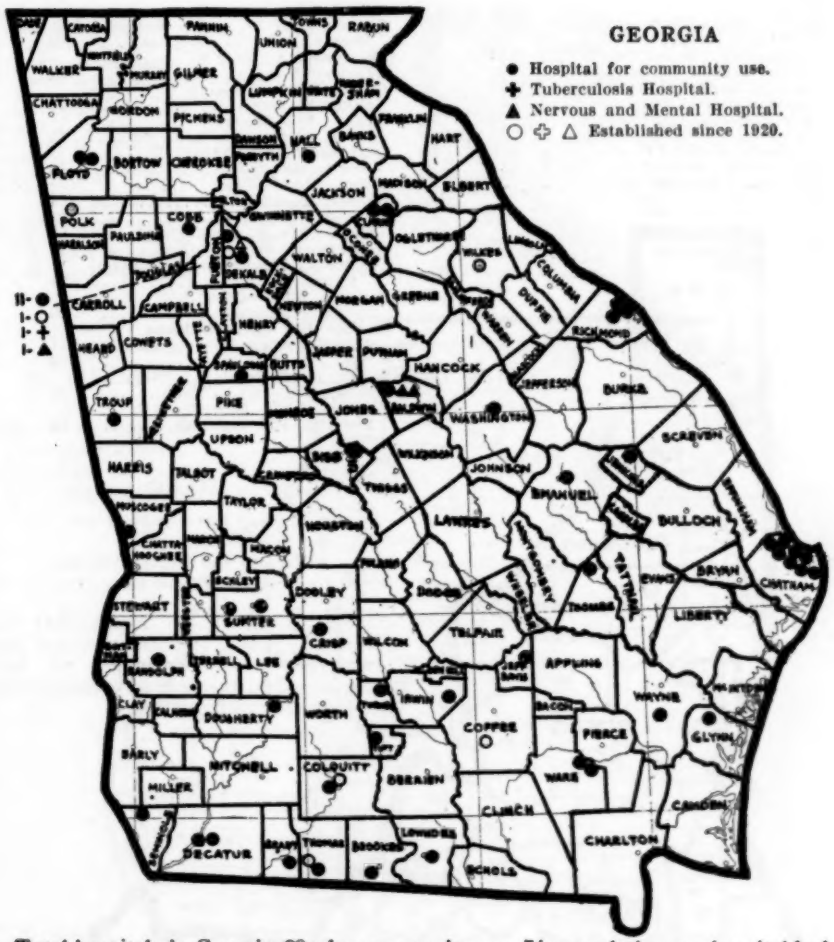
	Total Beds	Av. Beds in Use
Smallpox Hospital	41	16
St. Elizabeth's Hospital ★	4,418	4,297
Stanton Park Hospital	25	15
Tuberculosis Hosp. of D. of C.	180	126
Walter Reed General Hosp.★	1,200	965
Washington E. E. and T. Hosp.	10	5
Washington Sanitarium & Hospital ★	200	117
Washington Sanitarium Mission Hospital	14	1
Total for community use, 25	8,533	7,162

The District of Columbia is considered as being a single district, which has the above-indicated hospitals.

The hospitals in District of Columbia, 40; for community use, 25; population per hospital bed, 58; percentage of beds occupied, 83; percentage of counties without hospitals, 0.0.

FLORIDA

	Total Beds	Av. Beds in Use
Arcadia, 3,479—De Soto		
Arcadia General Hospital	25	15
Century, 1,000—Escambia		
Century Hospital	20	10
Clearwater, 2,427—Pinellas		
Morton F. Plant Endowed Hosp.	31	16
Daytona, 5,445—Volusia		
Dr. Bohannon's Hospital and Sanitarium	25	15
Daytona Private Hospital and Sanitarium	20	10
Daytona Beach, 825—Volusia		
McLeod Hospital	25	17
Deland, 3,324—Volusia		
Deland Memorial Hospital	24	10
Fort Lauderdale, 1,000—Broward		
Edwards Hospital	25	18
Fort Myers, 3,678—Lee		
Robert E. Lee Memorial Hosp.	30	14
Homestead, 1,307—Dade		
Post Graduate Hospital	12	6
Jacksonville, 95,450—Duval		
Brewster Hospital (Colored)	32	27
Duval County Hospital ★	110	102
Riverside Hospital, Inc.	35	33
St. Luke's Hospital ★	100	88
St. Vincent's Hospital	64	55
Lake City, 3,341—Columbia		
Lake Shore Hospital	25	9
Lakeland, 7,062—Polk		
Dr. Causey's Sanitarium	25	9
Morrell Memorial Hospital	45	16
Marianna, 1,915—Jackson		
Baltzell Hospital	15	11



Total hospitals in Georgia, 99; for community use, 74; population per hospital bed, 695; percentage of beds occupied, 59; percentage of counties without hospitals, 68.3.

Total hospitals in Florida, 70; for community use, 49; population per hospital bed, 511; percentage of beds occupied, 58; percentage of counties without hospitals, 47.6.

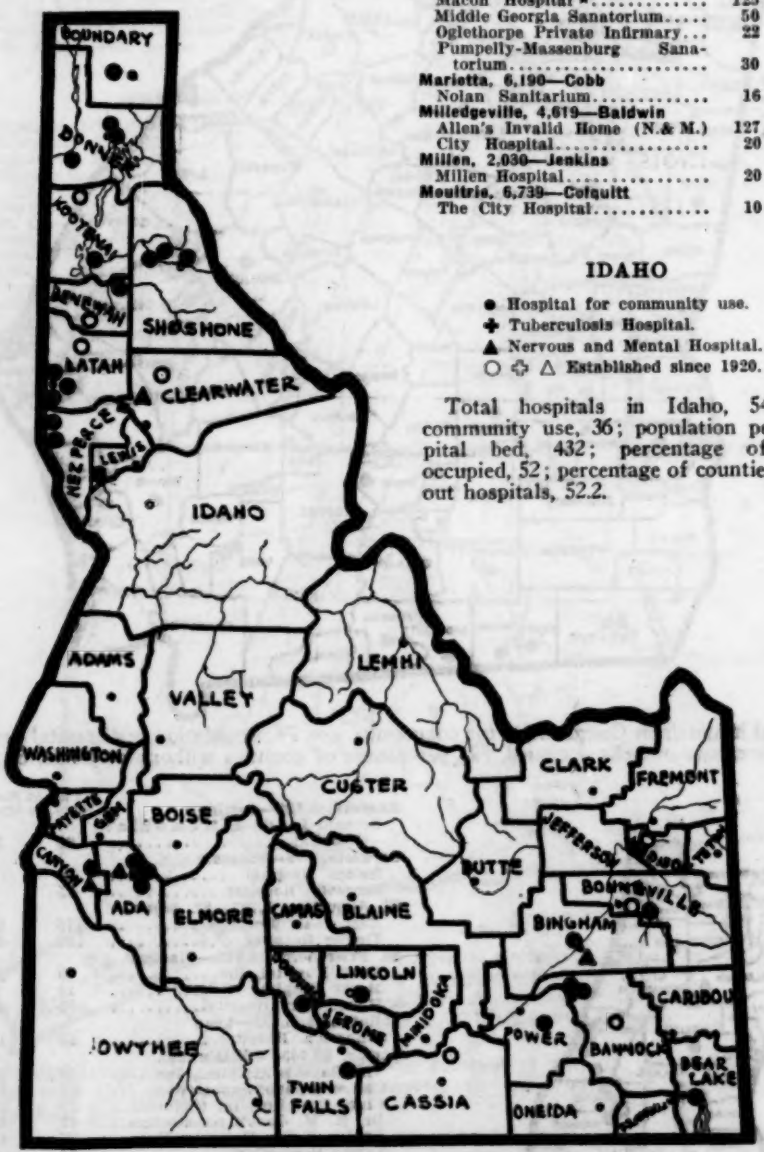
	Total Beds	Av. Beds in Use
Miami, 69,754—Dade		
Gowdy Hospital	12	6
James M. Jackson Memorial Hospital	225	150
Riverview Hospital	20	15
South Side Hospital	20	14
Miami Beach, 644—Dade		
Allison Hospital	58	New
Ocala, 4,370—Marion		
Marion General Hospital	35	35
Orlando, 9,257—Orange		
Florida Sanitarium	135	51
Orange General Hospital	106	73
Palatka, 5,102—Putnam		
Mary Lawson Sanatorium	18	9
Parkview Hospital	26	10
Pensacola, 25,305—Escambia		
Pensacola Hospital	100	75
Quincy, 2,540—Gadsen		
Gadsden County Hospital, Inc.	26	14
Safety Harbor, 429—Pinellas		
Espiritu Santo Springs Sanit.	50	23
Sanford, 5,588—Seminole		
Fernald-Laughton Memorial Hospital	26	10
Sarasota, 840—Sarasota		
Halton Hospital	10	5
Sarasota Hospital	25	3
St. Augustine, 6,192—St. Johns		
East Coast Hospital	115	60
Flagler Hospital	100	40
St. Petersburg, 26,847—Pinellas		
Faith Hospital, Inc.	40	20
Mercy Hospital (Colored)	13	8
Mound Park Hospital	60	48
Tallahassee, 5,637—Leon		
Johnson's Hospital	25	12
Tampa, 94,743—Hillsborough		
The Bayside Hospital, Inc.	40	35
Centro Espanol Sanatorium	52	10
Clara Frye Hospital (Colored)	75	35
Dr. H. M. Cook's Sanatorium	47	31
Gordon Keller Memorial Hosp.	85	67
Tampa Sanitarium	10	2
West Palm Beach, 8,659—Palm Beach		
The Good Samaritan Hospital	200	98
Pine Ridge Hospital	30	15
Total for community use, 49	2,472	1,455

In Florida the following thirty counties have no hospitals for community use: Baker, Bay, Bradford, Calhoun, Citrus, Clay, Franklin, Hamilton, Hernando, Holmes, Jefferson, Lafayette, Lake, Levy, Liberty, Madison, Manatee, Monroe, Nassau, Okaloosa, Osceola, Pasco, St. Lucie, Santa Rosa, Sumter, Suwannee, Taylor, Wakulla, Walton, Washington.

GEORGIA

	Total Beds	Av. Beds in Use
Albany, 13,451—Dougherty		
Phoebe Putney Memorial Hosp.	40	20
Americus, 9,010—Sumter		
Americus and Sumter County Hospital	30	18
Athens, 18,787—Clarke		
Athens General Hospital, Inc.	75	30
St. Mary's Hospital	50	23
Atlanta, 200,616—Fulton		
Atlanta Hospital	25	18
Battle Hill Sanatorium (T.B.)	177	165
Blackman Sanitarium	40	30

	Total Beds	Av. Beds in Use
Dr. Brawner's Sanitarium (N.& M.)	40	30
Contagious Disease Hospital	60	35
Davis—Fischer Sanatorium ★	160	80
Georgia Baptist Hospital ★	118	90
Grady Memorial Hospital ★	425	325
Mercy Hospital (Colored)	30	20
Dr. Noble's Private Infirmary	25	9
Piedmont Hospital ★	121	85
St. Joseph Infirmary ★	135	110
St. Mary's Hospital	25	15



	Total Beds	Av. Beds in Use
Emory University, —— —DeKalb		
Wesley Memorial Hospital ★	300	106
Gainesville, 6,272—Hall		
Downey Hospital, Inc.	52	16
Griffin, 8,240—Spalding		
Griffin Hospital	50	18
Jesup, 1,415—Wayne		
Dr. T. W. Causey's Sanitarium	15	10
LaGrange, 23,523—Troup		
Dunson Hospital	40	24
Macon, 58,237—Bibb		
Lundy Hospital	24	15
Macon Hospital ★	125	96
Middle Georgia Sanatorium	50	17
Oglethorpe Private Infirmary	22	14
Pumpelly-Massenburg Sanatorium	30	24
Marietta, 6,190—Cobb		
Nolan Sanitarium	16	4
Milledgeville, 4,619—Baldwin		
Allen's Invalid Home (N.& M.)	127	80
City Hospital	20	10
Millen, 2,030—Jenkins		
Millen Hospital	20	6
Moultrie, 6,739—Colquitt		
The City Hospital	10	5

IDAHO

● Hospital for community use.
✚ Tuberculosis Hospital.
▲ Nervous and Mental Hospital.
○ ✣ △ Established since 1920.

Total hospitals in Idaho, 54; for community use, 36; population per hospital bed, 432; percentage of beds occupied, 52; percentage of counties without hospitals, 52.2.

	Total Beds	Av. Beds in Use
Augusta, 55,245—Richmond		
Margaret Wright Hospital	20	11
University Hospital ★	261	148
Wilhenford Children's Hospital	50	23
Bainbridge, 4,792—Decatur		
Bainbridge Hospital	30	23
Riverside Hospital	24	16
Barwick, 381—Brooks		
Sanchez Private Sanitarium	15	6
Brunswick, 16,809—Glynn		
Brunswick City Hospital	50	20
Cairo, 1,908—Grady		
Dr. Walker's Sanitarium	15	8
Cedartown, 4,053—Polk		
Hall-Chaudron Hospital	10	3
Columbus, 44,244—Muscogee		
Columbus City Hospital	125	58
Cordele, 6,538—Crisp		
Cordele Sanatorium	12	5
Cuthbert, 3,210—Randolph		
Patterson Hospital	21	10
Decatur, 6,150—DeKalb		
Georgia Sanitarium	12	4
Scottish Rite Hospital	64	60
Donalsonville, 747—Seminole		
Chason's Hospital	40	36
Douglas, 3,401—Coffee		
Clark and Smith Sanitarium	14	6

	Total Beds	Av. Beds in Use
Newnan, 7,037—Coweta		
Newnan Hospital	30	8
Plains, 611—Sumter		
Wise Sanitarium, Inc.	60	24
Rome, 13,905—Floyd		
Frances Berrien Hospital	25	13
Harbin Hospital	75	25
Sandersville, 2,641—Washington		
Rawling's Sanitarium	100	53
Savannah, 93,134—Chatham		
Charity Hospital	42	20
Georgia Infirmary	80	55
Oglethorpe Sanatorium	50	25
Park View Sanitarium	60	50
St. Joseph's Hospital	125	96
Savannah Hospital	65	40
Telfair Hospital	52	35
Stone Mountain, 1,062—DeKalb		
The Cheston King Sanitarium, Inc. (N.&M.)	35	22
Swainsboro, 1,313—Emanuel		
Franklin-Coleman Hospital	15	8
Thomasville, 8,196—Thomas		
John D. Archbold Mem. Hosp.	94	34
Tifton, 3,005—Tift		
Coastal Plain Hospital	10	6
Valdosta, 12,554—Lowndes		
Little-Griffin Private Hospital	30	13

	Total Beds	Av. Beds in Use
Vidalia, 1,776—Tombs		
Vidalia Hospital	25	15
Washington, 3,065—Wilkes		
Washington General Hospital	20	5
Waycross, 20,098—Ware		
Atlantic Coast Lines Hospital	90	40
King's Daughters' Hospital	35	25
Five General Hospitals of less than 10 beds	37	16
Total for community use, 74	4,395	2,613

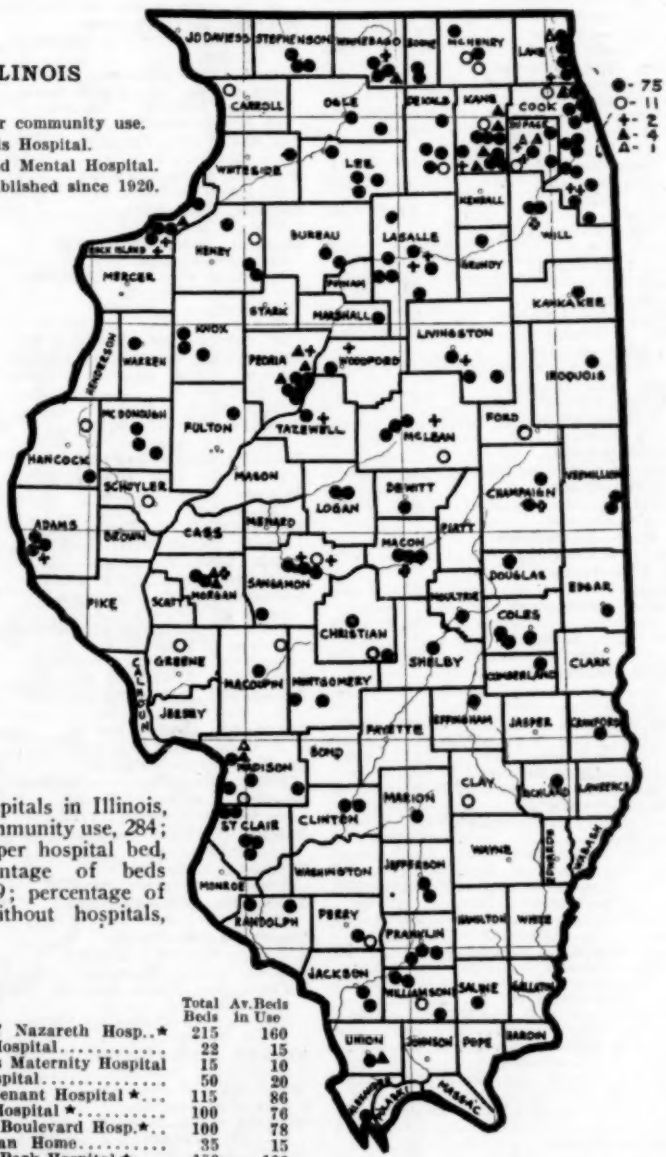
In Georgia the following one hundred and ten counties have no hospitals for community use: Appling, Bacon, Banks, Bartow, Ben Hill, Berrien, Bryan, Bulloch, Burke, Butts, Calhoun, Camden, Campbell, Candler, Carroll, Catoosa, Charlton, Chattahoochee, Chattooga, Cherokee, Clay, Clayton, Clinch, Columbia, Coweta, Crawford, Dade, Dawson, Dodge, Dooly, Douglas, Early, Echols, Effingham, Elbert, Evans, Fannin, Fayette, Forsyth, Franklin, Gilmer, Glascock, Gordon, Greene, Gwinnett, Habersham, Hancock, Haralson, Harris, Hart, Heard, Henry, Houston, Jackson, Jasper, Jefferson, Johnson, Jones, Laurens, Lee, Liberty, Lincoln, Lumpkin, McDuffie, McIntosh, Macon, Madison, Marion, Meriwether, Miller, Milton, Mitchell, Monroe, Montgomery, Morgan, Murray, Newton, Oconee, Oglethorpe, Pickens, Pierce, Pike, Pulaski, Putnam, Rabun, Rockdale, Schley, Screven, Spalding, Stewart, Talbot, Taliaferro, Tattnall, Taylor, Telfair, Terrell, Towns, Twiggs, Union, Upson, Walker, Walton, Warren, Webster, Wheeler, White, Whitfield, Wilcox, Wilkinson, Worth.

IDAHO

	Total Beds	Av. Beds in Use
American Falls, 1,547—Power		
Bethany Deaconess Hospital	17	9
Blackfoot, 4,822—Bingham		
Blackfoot General Hospital	10	8
Boise, 23,042—Ada		
St. Alphonsus Hospital ★	125	76
St. Luke's Hospital	53	43
Bonners Ferry, 1,236—Boundary		
Bonnera Ferry Hospital	25	17
Coeur d'Alene, 6,473—Kootenai		
Coeur d'Alene Hospital	40	10
Elk River, —— —Clearwater		
Elk River Hospital	12	3
Gooding, 1,933—Gooding		
Gooding County Hospital	20	10
Idaho Falls, 8,064—Bonneville		
The Idaho Falls Latter-Day Saints' Hospital	64	30
Spencer Hospital, Inc.	40	20
Kellogg, 3,017—Shoshone		
Wardner Hospital	15	12
Lava Hot Springs, 662—Bannock		
Lava Hot Springs Municipal Sanitarium	30	5
Lewiston, 6,574—Nez Perce		
St. Joseph's Hospital	90	30
White Hospital	30	20
Malad City, 2,598—Oneida		
Community Hospital	10	4
Montpelier, 2,984—Bear Lake		
Montpelier Hospital	30	26
Moscow, 3,956—Latah		
Gritman Private Hospital	25	6
Inland Empire Hospital	15	9
Nampa, 7,621—Canyon		
Mercy Hospital	35	14
Nazarene Missionary Sanitarium	25	16
Pocatello, 18,337—Bannock		
Pocatello General Hospital	54	30
St. Anthony's Mercy Hospital	50	20
Potlatch, 1,500—Latah		
Potlatch Hospital	19	9
Priest River, 545—Bonner		
Priest River Hospital	15	5
Rexburg, 3,569—Madison		
Rexburg General Hospital	12	7
Sandpoint, 2,878—Bonner		
Page Hospital	30	18
Shoshone, 1,155—Lincoln		
Dill Hospital	12	6
Spirit Lake, 940—Kootenai		
Lewis and Clark Hospital	10	5
St. Maries, 1,960—Benewah		
Dr. Platt's Hospital	15	6
St. Maries Hospital	40	22
Twin Falls, 8,324—Twin Falls		
Twin Falls County General Hospital	55	34
Wallace, 2,816—Shoshone		
Providence Hospital	45	28
Wallace Hospital	50	31
Three General Hospitals of less than 10 beds	20	10
Total for community use, 36	1,138	599

In Idaho the following twenty-three counties have no hospitals for community use: Adams, Blaine, Boise, Butte, Camas, Caribou, Clark, Custer, Elmore, Franklin, Fremont, Gem, Idaho, Jefferson, Jerome, Lemhi, Minidoka, Oneida, Owyhee, Payette, Teton, Valley, Washington.

ILLINOIS	Total Beds	Av. Beds in Use
Alton, 26,797—Madison		
St. Joseph's Hospital	75	40
Amboy, 1,749—Lee		
Amboy Public Hospital	20	8
Anna, 2,809—Union		
Hale-Willard Memorial Hospital	26	5
Augusta, 1,146—Hancock		
Augusta Hospital	25	10
Aurora, 40,254—Kane		
Aurora Hospital	67	42
Kane Co. Spring Brook Sanitarium (T.B.)	56	53
Mercyville Sanitarium (N.& M.)	70	63
St. Charles Hospital	100	62
St. Joseph's Hospital	50	50
Batavia, 4,436—Kane		
Bellevue Place Sanitarium (N.& M.)	35	28
Kane County Home Hospital	25	20
Belleville, 26,969—St. Clair		
St. Elizabeth's Hospital	100	75
St. Vincent's Hospital	45	30
Belvidere, 7,760—Boone		
Highland Hospital	39	15
St. Joseph's Hospital	35	15
Benton, 7,201—Franklin		
Moore Hospital	25	14
Berwyn, 18,856—Cook		
Berwyn Hospital	50	20
Bloomington, 30,421—McLean		
Brokaw Hospital	75	65
Mennonite Sanitarium	65	32
St. Joseph's Hospital	225	118
Blue Island, 13,184—Cook		
St. Francis' Hospital	100	55
Breese, 2,128—Clinton		
St. Joseph's Hospital	20	7
Cairo, 15,572—Alexander		
St. Mary's Hospital	120	50
Canton, 11,027—Fulton		
Graham Hospital	26	23
Carbondale, 6,267—Jackson		
Holden Hospital	50	25
Carlinville, 5,212—Macoupin		
Kelso Hospital	10	6
Centralia, 14,082—Marion		
St. Mary's Hospital	50	25
Champaign, 18,191—Champaign		
Burnham City Hospital	65	45
Charleston, 6,600—Coles		
M. A. Montgomery Memorial Sanatorium	25	10
Chatsworth, 1,087—Livingston		
Chatsworth Hospital	10	3
Chicago, 2,995,239—Cook		
Alexian Brothers' Hospital ★	280	187
American Hospital	140	85
Annie W. Durand Hospital	60	47
Auburn Park Hospital	30	18
Augustana Hospital ★	246	214
Bethany Sanitarium and Hosp.	14	8
Burnside Hospital	50	45
Chicago E. E. N. & T. Hosp.	15	10
Chicago Fresh Air Hospital (T.B.)	104	100
Chicago General Hospital	52	32
Chicago Hospital	50	17
Chicago Lying-In Hospital	140	122
Chicago Municipal Tuberculosis Sanitarium	945	923
Chicago Sanitarium (N.& M.)	30	26
Children's Memorial Hospital †	185	153
Columbia Hospital	16	12
Columbus Hospital	165	150
Cook County Hospital ★	2,500	1,631
Cook County Psychopathic Hosp.	167	101
Englewood Hospital ★	150	110
Evangelical Deaconess Hospital	32	28
Frances E. Willard Hosp.★	125	75
Franklin Boulevard Hospital	65	60
Garfield Park Hospital, Inc.	82	70
German Evangelical Deaconess Hospital ★	150	88
The Gibbs Sanitarium (N.& M.)	27	20
Grant Hospital ★	140	113
Halsted Industrial Hospital	50	50
Henrotin Memorial Hospital	75	57
Hospital of St. Anthony de Padua ★	189	150
Illinois Central Hospital ★	175	120
Illinois E. & E. Infirmary †	140	135
Iroquois Memorial Hospital	24	27
Isolation Hospital	35	5
Jackson Park Hospital	115	85
Jefferson Park Hospital	75	53
John B. Murphy Hospital ★	100	80
Lakeside Hospital	110	70
Lake View Hospital	50	40
Lutheran Deaconess Home and Hospital ★	200	78
Lutheran Memorial Hospital ★	200	85
Mercy Hospital ★	400	325
Michael Reese Hospital ★	426	311
Mid West Hospital	60	50
Misericordia Hospital	30	15
Mother Cabrini Memorial Hosp.	150	75
Mt. Sinai Hospital ★	100	72
Municipal Contagious Hospital	300	190
North Avenue Hospital	15	7
North Chicago Hospital	90	68
Norwegian-American Hospital ★	150	121
Post Graduate Hospital	85	45
Presbyterian Hospital ★	425	368
Provident Hospital ★ (col.)	59	50
Pullman Emergency Hospital	24	5
Ravenswood Hospital ★	137	84
Research and Educational Hosp.★	150	90
Resthaven Convalescent Home	32	32
Robert Burns Hospital	40	32
Rogers Park Hospital	10	10
Roseland Community Hospital	101	48
Shore View Sanitarium	10	8
South Chicago Community Hosp.	44	30
South Shore Hospital ★	125	85
St. Anne's Hospital ★	100	97
St. Bernard's Hospital ★	200	140
St. Elizabeth's Hospital ★ †	225	112
St. Joseph's Hospital ★	205	120
St. Luke's Hospital ★	800	283
St. Mary of Nazareth Hosp. ★	215	160
St. Paul's Hospital	22	15
St. Vincent's Maternity Hospital	15	10
Streeter Hospital	50	20
Swedish Covenant Hospital ★	115	86
University Hospital ★	100	76
Washington Boulevard Hosp.★	100	78
Washingtonian Home	35	15
Washington Park Hospital ★	170	109
Wesley Memorial Hospital ★	250	213
West Side Hospital ★	166	106
Women and Children's Hosp.★	100	75
Chicago Heights, 22,117—Cook		
St. James' Hospital	60	36
Christopher, 1,825—Franklin		
Christopher Hospital	15	8
Clinton, 5,898—De Witt		
Dr. John Warner Hospital	25	8
Compton, 387—Lee		
Compton Hospital	10	6
Creal Springs, 936—Williamson		
Creal Springs Sanitarium	40	15
Danville, 37,021—Vermilion		
Lake View Hospital ★	112	84
St. Elizabeth's Hospital	125	120
Decatur, 53,859—Macon		
Decatur & Macon Co. Hosp.★	130	102
Macon Co. Tuberculosis Sanat.	40	39
St. Mary's Hospital	106	92
Wabash Employees' Hospital	85	54
Deerfield, —— —Lake		
Ridge Farm Preventorium	28	27
DeKalb, 9,259—DeKalb		
DeKalb Public Hospital	50	24
St. Mary's Hospital	50	35
Dixon, 8,191—Lee		
Dixon Public Hospital	35	27
DuQuoin, 7,285—Perry		
Marshall Browning Hospital	65	13
East St. Louis, 71,423—St. Clair		
Evangelical Deaconess Hospital	50	40
St. Mary's Hospital	110	90
Edwardsville, 5,336—Madison		
Madison County Hospital	20	18
Elgin, 28,291—Kane		
Lakeview Sanatorium	15	2
Resthaven Sanitarium (N.& M.)	60	56
Sherman Hospital	85	60
St. Joseph's Hospital	60	54
Eureka, 1,159—Woodford		
Eureka Hospital	10	5
Evanston, 43,883—Cook		
Evanston Hospital ★	213	154
Evanston Sanitarium	12	7
Grove House for Convalescents	35	30
St. Francis Hospital ★	150	94
Flora, 2,704—Clay		
Flora Hospital	14	5
Freeport, 20,688—Stephenson		
Evangelical Deaconess Hosp.	35	24
Freeport General Hospital	35	23
St. Francis Hospital	125	110
Galesburg, 24,822—Knox		
Galesburg Cottage Hospital	79	53
St. Mary's Hospital	60	51
Geneseo, 3,375—Henry		
J. C. Hammond City Hospital	12	6
Geneva, 2,803—Kane		
Community Hospital	75	35
Granite City, 18,166—Madison		
St. Elizabeth's Hospital	60	52



Total hospitals in Illinois, 380; for community use, 284; population per hospital bed, 275; percentage of beds occupied, 69; percentage of counties without hospitals, 31.3.

	Total Beds	Av. Beds in Use
Harrisburg, 7,125—Saline		
Harrisburg Hospital	30	15
Lightner Hospital	30	16
Harvard, 3,294—McHenry		
Harvard General Hospital	30	15
Peck's Hospital	12	7
Harvey, 9,216—Cook		
Ingalls Memorial Hospital	50	35
Henry, 1,637—Marshall		
Drs. Cromwell & Coggshall Hospital	10	5
Herrin, 13,323—Williamson		
Herrin Hospital	40	12
Highland, 2,675—Madison		
St. Joseph's Hospital	50	48
Highland Park, 6,167—Lake		
Highland Park Hospital	56	28
Hillsboro, 5,074—Montgomery		
Hillsboro Hospital	26	20
Hinsdale, 2,451—DuPage		
Hinsdale Sanitarium	150	131
Jacksonville, 15,931—Morgan		
Norbury Sanatorium (N.& M.)	100	91
Oaklawn Sanatorium (T.B.)	30	25
Our Savior's Hospital	90	60
Passavant Memorial Hospital	80	46
Joliet, 40,578—Will		
Silver Cross Hospital	94	74
St. Joseph's Hospital	160	160
Will Co. Tuberculosis Sanitarium	70	35
Kankakee, 18,470—Kankakee		
St. Mary's Hospital	88	50
Kenilworth, 1,188—Cook		
Kenilworth Sanitarium (N.& M.)	34	25
Kewanee, 19,733—Henry		
Kewanee Public Hospital	53	31
St. Francis Hospital	55	30
La Harpe, 1,349—Hancock		
Davier Memorial Hospital	15	6
Lake Forest, 3,657—Lake		
Alice Home Hospital	25	9
LaSalle, 13,907—LaSalle		
St. Mary's Hospital	80	50
LeRoy, 1,680—McLean		
O. M. Thompson Sanitarium	10	6
Lincoln, 12,443—Logan		
Evangelical Deaconess Hospital	60	36
St. Clara's Hospital	65	45
Litchfield, 6,215—Montgomery		
St. Francis' Hospital	120	100
Mackinaw, 822—Tazewell		
Oak Knoll (T.B.)	38	37
Macomb, 6,714—McDonough		
Holmes Hospital	50	50
Marietta Phelps Hospital	30	17
St. Francis' Hospital	50	30
Marion, 9,582—Williamson		
Marion Hospital	18	8
Mattoon, 14,739—Coles		
Memorial Methodist Hospital	40	28
Maxwell, (Hanna City, P.O.)—Peoria		
Peoria County Hospital	55	30
Mendota, 3,934—La Salle		
Harris Hospital	20	8
Minonk, 2,109—Woodford		
Woodford County Tuberculosis Sanatorium	16	14
Moline, 33,910—Rock Island		
Lutheran Hospital	63	46
Moline City Hospital	100	36
Monmouth, 8,116—Warren		
Monmouth Hospital	33	25
Mooseheart, —— —Kane		
Mooseheart Hospital	70	50
Morris, 4,505—Grundy		
Morris Hospital	20	14
Mt. Vernon, 9,815—Jefferson		
Dr. Edmundson's E. E. N. and T. Infirmary	15	10
Mt. Vernon Hospital	40	24
Murphysboro, 12,524—Jackson		
St. Andrew's Hospital	50	50
Naperville, 3,830—DuPage		
Edward Sanatorium (T.B.)	90	85
Mrs. Mary C. Samuels Home	10	5
Normal, 5,143—McLean		
Fairview Sanatorium (T.B.)	49	46
Oak Forest, —— —Cook		
Cook County Tuberculosis Hosp.	628	467
Oak Park, 51,423—Cook		
Oak Park Hospital ★	135	90
West Suburban Hospital ★	200	160
Olney, 4,491—Richmond		
Olney Sanitarium	75	43
Oregon, 2,227—Ogle		
Oregon Hospital	14	4
Ottawa, 11,542—LaSalle		
Buffalo Rock Sanitarium	90	New
Highland, LaSalle Co. T.B. Sanitarium	50	44
Illinois Valley Hospital	20	15
Ottawa Tuberculosis Sanatorium	50	45
Ryburn Memorial Hospital	52	30
Palatine, 1,210—Cook		
Palatine Hospital	12	9
Pana, 6,122—Christian		
Huber Memorial Hospital	43	22
The Little Sanitarium	30	New
Paris, 7,985—Edgar		
Paris Hospital	25	15
Pekin, 13,324—Tazewell		
Pekin Public Hospital	30	20
Peoria, 81,564—Peoria		
John C. Proctor Hospital	118	75
Methodist Hospital	93	88
Michell Farm (N.& M.)	25	20
Peoria Isolation Hospital	42	9
Peoria Municipal Tuberculosis Sanitarium	50	43
Peoria Sanitarium (N.& M.)	25	20
St. Francis' Hospital ★	225	142
Sulphur Springs Sanitarium	20	10
Peru, 8,869—LaSalle		
Isolation Hospital	20	2
Peoples Hospital	40	34
Pontiac, 6,664—Livingston		
Livingston County Sanatorium (T.B.)	30	24
St. James' Hospital	50	26
Princeton, 4,131—Bureau		
Julia Rackley Perry Memorial Hospital	28	12
Quincy, 37,478—Adams		
Adams Co. Tuberculosis Sanat.	50	34
Blessing Hospital	100	65
St. Mary's Hospital	180	130
Red Bud, 1,240—Randolph		
St. Clement's Hospital	20	3
Robinson, 3,368—Crawford		
Robinson Hospital	18	6
Rochelle, 3,310—Ogle		
Lincoln Hospital	56	23
Rockford, 76,462—Winnebago		
Rockford Hospital	88	60
Rockford Municipal Sanitarium (T.B.)	65	60
St. Anthony's Hospital	125	100
Swedish-American Hospital	64	47
Dr. Wilgus' Sanitarium (N.& M.)	35	30
Rock Island, 40,073—Rock Island		
Rock Island Municipal T.B. Sanatorium	20	20
St. Anthony's Hospital	150	85
Rushville, 2,275—Schuyler		
Culbertson Hospital	20	9
Sandwich, 2,459—DeKalb		
Woodward Memorial Hospital	14	10
Savanna, 5,237—Carroll		
Savanna City Hospital	14	9
Shelbyville, 3,590—Shelby		
Shelby Co. Memorial Hospital	18	10
Sparta, 3,340—Randolph		
Dr. Stevenson's Sanitarium	10	7
Springfield, 63,923—Sangamon		
David Prince Sanitarium	50	20
Palmer Tuberculosis Sanatorium	86	78
Springfield Hospital	100	80
St. John's Hospital	500	380
St. John's Sanitarium (T.B.)	190	185
Springvalley, 6,493—Bureau		
St. Margaret's Hospital	65	42
St. Charles, 4,099—Kane		
St. Charles City Hospital	25	12
Sterling, 8,182—Whiteside		
Public Hospital	25	10
Streator, 15,076—LaSalle		
St. Mary's Hospital	125	90
Sublette, 300—Lee		
Angear Hospital	15	4
Sycamore, 3,926—DeKalb		
Sycamore Municipal Hospital	20	9
Taylorville, 5,806—Christian		
St. Vincent's Hospital	60	40
Tuscola, 2,453—Douglas		
Jarman Memorial Hospital	28	11
Urbana, 11,348—Champaign		
Champaign County Hospital	18	16
Mercy Hospital	38	27
The Outlook (Champaign County T.B. Sanitarium)	48	42
Vandalia, 3,316—Fayette		
Mark Greer Hospital	19	New
Waterman, 450—DeKalb		
East Side Hospital	15	12
Watseka, 2,476—Iroquois		
Iroquois Hospital	27	20
Waukegan, 22,023—Lake		
Lake County General Hospital	65	61
Sheridan Road Sanitarium (N.& M.)	15	12
Victory Memorial Hospital	75	54
West Frankfort, 8,478—Franklin		
West Frankfort Union Hospital	100	64
Wheaton, 4,137—DuPage		
Howe Home	17	13
Mary E. Pogue Sanitarium (N.& M.)	35	33
Wheeling, 313—Cook		
Wheeling Hospital	10	4
White Hall, 2,954—Greene		
Walton Hospital	10	8
Winfield, 121—DuPage		
Chicago-Winfield Tuberculosis Sanitarium	112	102
Winfield Farms Sanitarium (N.& M.)	11	7
Winnetka, 6,694—Cook		
North Shore Health Resort	100	80
Woodstock, 5,523—McHenry		
Woodstock Hospital	20	15
Zeigler, 500—Franklin		
Zeigler Hospital	35	10
Nine General Hospitals of less than 10 beds	60	31
Total for community use, 284	25,240	17,557

In Illinois the following thirty-two counties have no hospitals for community use: Bond, Brown, Calhoun, Cass, Clark, Edwards, Fayette, Gallatin, Hamilton, Hardin, Henderson, Jasper, Jersey, Jo Daviess, Johnson, Kendall, Lawrence, Mason, Massac, Menard, Mercer, Monroe, Piatt, Pike, Pope, Pulaski, Scott, Stark, Wabash, Washington, Wayne, White.

INDIANA

	Total Beds	Av. Beds in Use
Alexandria, 4,172—Madison		
Alexandria Hospital	12	4
Anderson, 33,854—Madison		
Madison County Hospital (T.B.)	28	25
New Home Hospital	18	10
St. John's Hospital	100	30
Auburn, 3,919—DeKalb		
Dr. Bonnell M. Souder Hosp.	12	6
Bedford, 8,963—Lawrence		
Dunn Memorial Hospital	25	12
Bloomington, 12,589—Monroe		
Bloomington Hospital	35	20
Bluffton, 5,391—Wells		
Wells County Hospital	18	11
Brazil, 9,293—Clay		
Community Hospital	17	5
Clinton, 13,642—Vermilion		
Vermilion County Hospital	45	25
Columbus, 8,990—Bartholomew		
Bartholomew County Hospital	25	19
Connersville, 12,454—Fayette		
Fayette Memorial Hospital	37	24
Crawfordsville, 16,530—Montgomery		
Ben Hur Sanitarium	10	4
Culver Hospital	19	12
Crown Point, 3,232—Lake		
Lake Co. Tuberculosis Sanat.	100	80
Decatur, 4,762—Adams		
Adams Co. Memorial Hospital	50	25
Dillsboro, 471—Dearborn		
Dillsboro Sanitarium	120	70
Elkhart, 27,104—Elkhart		
Elkhart General Hospital	60	38
Elwood, 10,790—Madison		
Hoppenrath Hospital	10	4
Evansville, 93,601—Vanderburg		
Boehne Tuberculosis Sanatorium	80	31
The Hayden Hospital	40	25
Protestant Deaconess Hospital	120	75
St. Mary's Hospital	115	65
Walker Hospital	75	47
Frankfort, 13,051—Clinton		
Clinton County Hospital	51	14
Ft. Wayne, 97,846—Allen		
Allen Co. Isolation Hospital	11	1
Ft. Wayne Lutheran Hospital ★	115	102
Irene Byron T.B. Sanatorium	186	145
Methodist Episcopal Hospital	109	85
Dr. Pulliam's Private Sanitarium (N.& M.)	15	10
St. Joseph's Hospital ★	200	145
Garrett, 4,796—DeKalb		
Sacred Heart Hospital	40	30
Gary, 76,870—Lake		
Gary Hospital	100	40
Methodist Episcopal Hospital	100	60
St. Antonio Hospital	50	20
St. Mary's Mercy Hospital ★	125	115
Goshen, 9,525—Elkhart		
Goshen Hospital	38	12
Greencastle, 3,780—Putnam		
Putnam County Hospital	40	9
Greensburg, 5,345—Decatur		
Decatur Co. Memorial Hospital	35	10
Hammond, 50,385—Lake		
St. Margaret's Hospital ★	250	81
Hartford City, 6,183—Blackford		
Blackford County Hospital	30	10
Huntington, 15,914—Huntington		
Huntington County Hospital	25	20
Indianapolis, 358,819—Marion		
Dr. Batties Sanitarium	15	7
Indiana Christian Hospital	120	55
Indianapolis City Hospital ★	550	381
James Whitcomb Riley Hosp. †	150	141
Joseph Eastman Hospital	13	3
Julietta Insane Hospital	154	145
Methodist Episcopal Hospital ★	350	269
Mt. Jackson Sanitarium	32	28
Neuronhurst, Dr. Fletcher's Sanatorium (N.& M.)	50	40
Norways Sanatorium	30	20
Provident Hospital	30	10
Robt. W. Long Hospital ★	104	85
St. Francis Hospital	90	79
St. Vincent's Hospital ★	323	175
Jeffersonville, 10,098—Clark		
Clark Co. Memorial Hospital	36	14
Kendallville, 4,981—Noble		
Lakeside Hospital	11	8

	Total Beds	Av. Beds in Use
Lafayette, 23,790—Tippecanoe		
Lafayette Home Hospital	80	51
St. Elizabeth's Hospital ★	250	145
Wabash Valley Sanitarium	50	38
La Porte, 17,540—La Porte		
Holy Family Hospital	95	33
Lebanon, 6,257—Boone		
The Williams Hospital	30	15
Witham Memorial Hospital	21	10
Linton, 5,906—Greene		
Freeman City Hospital	14	5
Logansport, 23,120—Cass		
St. Joseph's Hospital	75	30
Madison, 6,711—Jefferson		
King's Daughters' Hospital	30	12
Milan, 718—Ripley		
Miwogco Mineral Springs & Sanitarium	120	40
Mishawaka, 16,671—St. Joseph		
St. Joseph Hospital	78	54
Muncie, 42,491—Delaware		
Muncie Home Hospital	62	39
New Albany, 22,992—Floyd		
St. Edward's Hospital	100	75
Newcastle, 16,955—Henry		
Miller Hospital	31	12
Newcastle Clinic Hospital	14	10
Noblesville, 4,758—Hamilton		
Hamilton Co. Hospital	25	12

INDIANA

● Hospital for community use.
✚ Tuberculosis Hospital.
▲ Nervous and Mental Hospital.
○ ✣ △ Established since 1920.

Total hospitals in Indiana, 167; for community use, 115; population per hospital bed, 366; percentage of beds occupied, 63; percentage of counties without hospitals, 32.6.

	Total Beds	Av. Beds in Use
Marion, 26,274—Grant		
Grant Co. Hospital	45	27
Martinsville, 4,895—Morgan		
Barnard's Sanitarium	30	24
Colonial Mineral Springs	50	50
Hill House Sanitarium	60	40
Home Lawn Mineral Springs Sanitarium	205	150
Martinsville Sanitarium	110	85
Morgan Co. Memorial Hospital	30	7
Dr. Scherer's Sanitarium	125	60
Whiting Mineral Springs Sanitarium	45	18
Michigan City, 20,299—La Porte		
St. Anthony's Hospital	100	75
Oaklandon, 353—Marion		
Sunnyside Sanatorium (T.B.)	180	175
Peru, 12,683—Miami		
Miami Co. Hospital	20	12
Wabash R.R. Employees Hosp.	35	25
Plymouth, 4,338—Marshall		
Marshall Co. Hospital	12	4
Portland, 5,958—Jay		
Jay Co. Hospital	12	10
Princeton, 7,132—Gibson		
Methodist Episcopal Hospital	30	18
Rensselaer, 2,912—Jasper		
Jasper Co. Hospital	17	10
Richmond, 30,495—Wayne		
Reid Memorial Hospital	63	42
St. Luke's Hospital	25	14
Rochester, 3,720—Fulton		
Woodlawn Hospital	15	12
Rome City, 450—Noble		
Kneipp Sanitarium	200	150
Rushville, 5,498—Rush		
Dr. Sexton's Hospital	11	7
Seymour, 7,348—Jackson		
Schneck Memorial Hospital	15	6
Shelbyville, 9,701—Shelby		
The Major Memorial Hospital	44	14
South Bend, 80,091—St. Joseph		
Epworth Hospital ★	150	90
Healthwin Hospital (T.B.)	115	108
St. Joseph Hospital	125	60
Sullivan, 4,489—Sullivan		
Mary Sherman Memorial Hosp.	60	28
Tell City, 4,086—Perry		
Parkview Hospital	10	2
Terre Haute, 71,071—Vigo		
St. Anthony's Hospital ★	210	80
Union Hospital	135	91
Union City, 3,406—Randolph		
Union City Hospital	15	5
Valparaiso, 6,518—Porter		
Christian Hospital	23	14
Vincennes, 18,271—Knox		
Good Samaritan Hospital	94	40
Wabash, 9,872—Wabash		
Wabash Co. Hospital	35	15
Warsaw, 5,478—Kosciusko		
McDonald Hospital	16	8
Washington, 8,705—Daviess		
Daviess Co. Hospital	22	3
West Baden, 832—Orange		
West Baden Springs Hotel Clinic	75	25
Winchester, 4,021—Randolph		
Randolph Co. Hospital	18	3
Two General Hospitals of less than 10 beds	12	8
Total for community use, 115	8,318	5,241

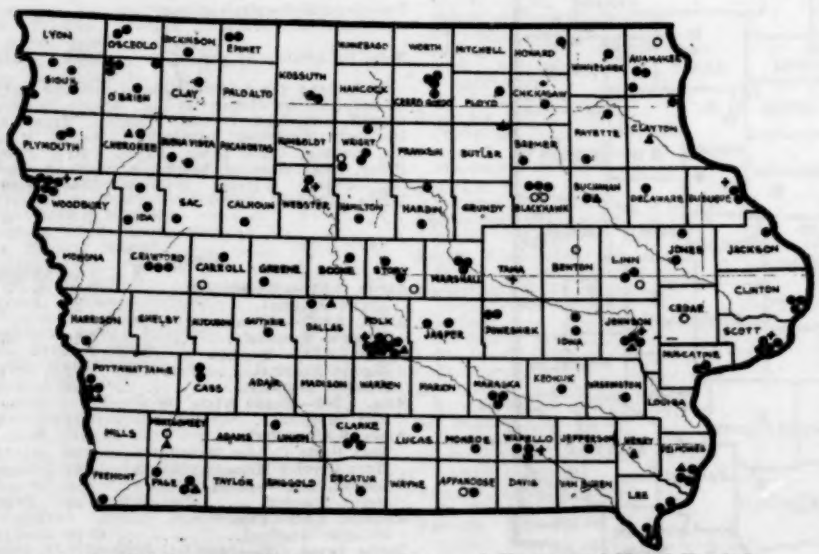
In Indiana the following thirty counties have no hospitals for community use: Benton, Brown, Carroll, Crawford, Dubois, Fountain, Franklin, Hancock, Hendricks, Jennings, Lagrange, Martin, Newton, Ohio, Owen, Parke, Perry, Pike, Posey, Scott, Spencer, Starke, Switzerland, Tipton, Union, Warren, Warrick, Washington, White, Whitley.

IOWA

	Total Beds	Av. Beds in Use
Akron, 1,324—Plymouth		
Akron Hospital	20	14
Albia, 5,067—Monroe		
Miner's Hospital	40	25
Algona, 3,724—Kossuth		
Algona Hospital	12	6
Kossuth Hospital	15	9
Alta, 1,290—Buena Vista		
Alta Hospital	12	6
Ames, 6,270—Story		
Iowa State College Hospital	110	18
Mary Greeley Memorial Hospital	35	10
Anamosa, 2,881—Jones		
Mercy Hospital	40	25
Atlantic, 5,329—Cass		
Atlantic Hospital	30	15
Battle Creek, 785—Ida		
New Battle Creek Hospital	14	10
Bellevue, 1,663—Jackson		
Moulton Hospital	20	12
Boone, 12,663—Boone		
Eleanor Moore Hospital	50	19
Burlington, 26,375—Des Moines		
Burlington Protestant Hospital	75	68
Des Moines County Asylum (N.& M.)	66	50
Mercy Hospital	50	35
St. Francis Hospital	50	38
Carroll, 4,254—Carroll		
St. Anthony's Hospital	120	40
Cedar Falls, 6,516—Blackhawk		
Sartori Memorial Hospital	21	13
Cedar Rapids, 45,566—Linn		
Mercy Hospital	200	175
St. Luke's Methodist Hospital ★	100	75
Centerville, 8,486—Appanoose		
Protestant Hospital, Inc.	25	15
St. Joseph Hospital	50	30
Chariton, 5,175—Lucas		
Iowa Cancer Hospital	20	9
Charles City, 7,350—Floyd		
Cedar Valley Hospital	25	15
Cherokee, 4,552—Cherokee		
Sioux Valley Hospital	35	9
Clarinda, 4,511—Page		
Kennelworth Hospital	32	15
Clarion, 2,826—Wright		
Tompkins & Walker Hospital	10	4
Clinton, 26,436—Clinton		
Jane Lamb Memorial Hospital	90	52
St. Joseph's Mercy Hospital	60	40
Colfax, 2,504—Jasper		
The Colfax Sanitarium	26	15
Council Bluffs, 36,162—Pottawattamie		
Jennie Edmundson Memorial Hospital	110	62
Mercy Hospital	100	62
St. Bernard's Hospital	250	218

	Total Beds	Av. Beds in Use
Cresco, 3,195—Howard		
St. Joseph's Mercy Hospital	31	9
Creston, 8,034—Union		
Greater Community Hospital	40	28
Davenport, 56,727—Scott		
Davenport Hospital	40	27
Mercy Hospital ★	125	90
Pine Knoll Sanitarium (T.B.)	80	46
St. Luke's Hospital	63	41
Decorah, 4,039—Winneshiek		
Decorah Hospital	20	7
Denison, 3,591—Crawford		
Denison Hospital	15	4
Des Moines, 126,468—Polk		
Broadlawns, Polk Co. Public Hospital (T.B.)	60	58
Des Moines City Hospital	75	55
Des Moines Detention Hospital	40	8
Iowa Congregational Hospital	45	30
Iowa Lutheran Hospital ★	150	120
Iowa Methodist Hospital ★	242	171
Mercy Hospital ★	142	129
Polyclinic Hospital	60	35
The Retreat (N.& M.)	50	35
Dubuque, 40,996—Dubuque		
Finley Hospital	100	55
St. Joseph's Mercy Hospital	125	50
St. Joseph's Sanitarium (N.& M.)	250	205
Sunny Crest Sanatorium (T.B.)	50	46
Eldora, 3,189—Hardin		
Eldora Booth Memorial Hospital	20	3
Elkader, 1,223—Clayton		
Clayton Co. Hospital for Insane	55	45
Iowa Falls, 3,954—Hardin		
Ellsworth Hospital	17	12
Keokuk, 14,423—Lee		
W. C. Graham Protestant Hosp.	40	25
St. Joseph's Hospital	75	60
Lake City, 3,110—Calhoun		
McCrary Hospital	25	7
Le Mars, 4,683—Plymouth		
Community Hospital	23	6
Sacred Heart Hospital	90	20
Manchester, 3,111—Delaware		
Manchester Hospital	10	3
Marengo, 2,048—Iowa		
Mineral Springs Hospital	15	5
Marshalltown, 15,731—Marshall		
Evangelical Deaconess Hospital	72	52
Mercy Hospital	75	35
Mason City, 22,682—Cerro Gordo		
Detention Hospital	12	2
Park Hospital	50	31
St. Joseph's Mercy Hospital	70	35
Story Hospital	13	7
McGregor, 1,239—Clayton		
Clark Hospital	15	4
Monticello, 2,257—Jones		
John McDonald Hospital	28	17
Muscatine, 16,068—Muscatine		
Bellevue Hospital	35	10
Benj. Hershey Memorial Hosp.	50	21
Nevada, 2,668—Story		
Iowa Sanitarium and Hospital	50	25
New Albin, 683—Allamakee		
New Albin Hospital	20	10
New Hampton, 2,539—Chickasaw		
St. Joseph's Hospital	50	35
Sibley, 1,803—Osceola		
Osceola Hospital	10	4
The Sibley Hospital	12	7
Sigourney, 2,210—Keokuk		
Sigourney Hospital	10	5
Sioux City, 71,227—Woodbury		
Lutheran Hospital	85	29
The Methodist Hospital	125	50
Sioux City Maternity Hospital	24	14
St. Joseph's Mercy Hospital ★	225	175
St. Vincent's Hospital	125	65
Spencer, 4,599—Clay		
Spencer Hospital	10	6
Storm Lake, 3,658—Buena Vista		
Swallum Hospital	23	5
Vinton, 3,381—Benton		
Virginia Gay Memorial Hosp.	30	5
Washington, 4,697—Washington		
Washington Co. Hospital	30	12
Waterloo, 36,771—Blackhawk		
Allen Memorial Hospital	91	25
St. Francis Hospital	75	60
Synodical Presbyterian Hosp.	50	25
Waverly, 3,352—Bremer		
St. Joseph's Mercy Hospital	50	25
Webster City, 5,657—Hamilton		
St. Joseph's Mercy Hospital	24	16
West Union, 1,777—Fayette		
West Union Community Hospital	15	7
Williamsburg, 1,251—Iowa		
The Watts Hospital	12	8
Fourteen General Hospitals of less than 10 beds	94	40
Total for community use, 145	7,533	4,708

IOWA



● Hospital for community use.
✚ Tuberculosis Hospital.
▲ Nervous and Mental Hospital.
○ ✣ △ Established since 1920.

Total hospitals in Iowa, 197; for community use, 145; population per hospital bed, 332; percentage of beds occupied, 62; percentage of counties without hospitals, 27.2.

	Total Beds	Av. Beds in Use
Estherville, 4,699—Emmett		
Birney Hospital	25	10
Coleman Hospital	45	20
Fairfield, 5,948—Jefferson		
Jefferson Co. Hospital	35	20
Ft. Dodge, 19,347—Webster		
Boulder Lodge Sanatorium (T.B.)	20	15
St. Joseph's Mercy Hospital	112	55
Ft. Madison, 12,066—Lee		
Sacred Heart Hospital	35	30
Grinnell, 5,362—Poweshiek		
Grinnell Community Hospital	56	12
St. Francis Hospital	40	18
Guthrie Center, 1,727—Guthrie		
Harrison Surgical Hospital	10	2
Hamburg, 1,817—Fremont		
Hamburg Hospital	10	4
Hartley, 1,306—O'Brien		
Hand Hospital	12	5
Hawarden, 2,491—Sioux		
Hawarden Hospital	10	5
Hull, 791—Sioux		
The Hull Hospital, Inc	16	6
Ida Grove, 2,020—Ida		
Ida Grove General Hospital	12	5
Independence, 3,673—Buchanan		
Peoples Hospital of Buchanan Co.	24	9
Iowa City, 11,267—Johnson		
Mercy Hospital	125	40
University Hospital ★	724	668
Newton, 6,627—Jasper		
City Hospital	44	15
Odebolt, 1,445—Sac		
Odebolt Hospital and Clinic	10	3
Oelwein, 7,455—Fayette		
Oelwein Hospital, Inc	15	12
Osceola, 2,684—Clarke		
Harken Hospital	20	9
Osceola Hospital	10	5
Osceola Sanitarium and Hosp.	10	7
Oskaloosa, 9,427—Mahaska		
Abbott Hospital	35	25
Mahaska Hospital	25	18
Mercy Hospital	40	23
Ottumwa, 23,003—Wapello		
Ottumwa Hospital	53	34
St. Joseph Hospital	35	25
Sunny Slope Sanatorium (T.B.)	40	34
Perry, 5,642—Dallas		
King's Daughters' Hospital	20	12
Postville, 1,039—Allamakee		
Postville Hospital	21	12
Red Oak, 5,578—Montgomery		
Red Oak Clinical Hospital	30	10
Rock Valley, 1,347—Sioux		
Rock Valley Hospital	10	3
Sheldon, 3,488—O'Brien		
Cram's Hospital	12	7
The Myers Hospital	20	4
Shenandoah, 5,255—Page		
Henry & Catherine Hand Hosp.	26	15

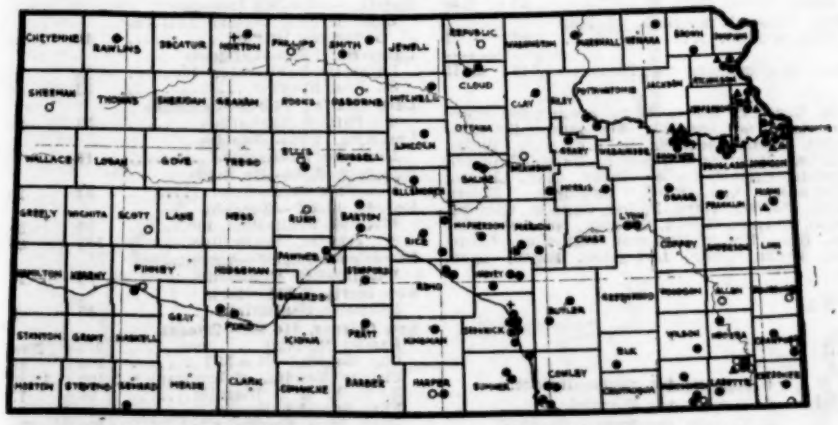
In Iowa the following twenty-seven counties have no hospitals for community use: Adair, Adams, Audubon, Butler, Davis, Franklin, Grundy, Hancock, Henry, Humboldt, Louisa, Lyon, Madison, Marion, Mills, Mitchell, Monona, Palo Alto, Pocahontas, Ringgold, Shelby, Taylor, Van Buren, Warren, Wayne, Winnebago, Worth.

KANSAS

	Total Beds	Av. Beds in Use
Abilene, 4,895—Dickinson		
The Dickinson Co. Memorial Hospital	20	8
Anthony, 2,740—Harper		
The Galloway Hospital	20	10
Arkansas City, 14,003—Cowley		
Arkansas City Hospital	50	15
Mercy Hospital	22	18
Atchison, 15,028—Atchison		
Atchison Hospital Association	25	12
Prospect Park Sanitarium (N.& M.)	40	25
Atwood, 919—Rawlins		
Henneberger Hospital	12	5
Augusta, 4,219—Butler		
Augusta Hospital	24	7
Baxter Springs, 3,668—Cherokee		
Wallace Hospital	11	5
Belleville, 2,254—Republic		
R. G. Patterson Memorial Hosp.	22	10
Beloit, 3,315—Mitchell		
The Beloit Hospital	12	10
Bonner Springs, 1,626—Wyandotte		
Bonner Springs Sanitarium (N.& M.)	25	17
Chanute, 9,829—Neosho		
Johnson Hospital	30	20
Coffeyville, 16,229—Montgomery		
Coffeyville General Hospital	10	5
South East Kansas Hospital	26	17
Columbus, 3,155—Cherokee		
Maud Norton Mem. City Hosp.	12	6
Concordia, 4,705—Cloud		
Concordia Hospital	40	11
St. Joseph's Hospital	75	51
Council Grove, 2,857—Morris		
Council Grove Hospital	10	5
Dodge City, 5,061—Ford		
McCarty Hospital	14	10
St. Anthony's Hospital	20	20
Eldorado, 9,500—Butler		
St. Luke's Hospital	50	17
Ellsworth, 2,065—Ellsworth		
Ellsworth Hospital	40	20
Emporia, 12,243—Lyon		
Newman Memorial Co. Hospital	65	36
St. Mary's Hospital	24	10
Ft. Scott, 11,763—Bourbon		
Ft. Scott Hospital	50	42
Mercy Hospital	45	25
Garden City, 3,848—Finney		
Bailey Hospital	10	10
Garden City Hospital	12	8
Goessel, 80—Marion		
Bethesda Hospital	25	18
Goodland, 2,664—Sherman		
Goodland Methodist Hospital	15	7
Great Bend, 4,460—Barton		
St. Rose Hospital	50	25
Halstead, 1,663—Harvey		
Halstead Hospital	70	40
Hays, 3,165—Ellis		
Hays Protestant Hospital	35	17
St. Anthony's Hospital	50	37

	Total Beds	Av. Beds in Use
Herington, 4,065—Dickinson		
Herington Hospital	15	12
Hillsboro, 1,451—Marion		
Salem Home & Hospital	35	13
Hoisington, 2,395—Barton		
Atkin Hospital	20	10
Horton, 4,009—Brown		
Horton Hospital	12	4
Hutchinson, 25,970—Reno		
Grace Methodist Hospital	85	42
St. Elizabeth's Mercy Hospital	75	25
Parsons, 14,839—Labette		
Mercy Hospital	50	10
M. K. & T. Railroad Hosp.	56	26
Parsons Hospital	10	8
C. T. Wood's Memorial Hospital	15	7
Pittsburg, 19,182—Crawford		
Mt. Carmel Hospital	75	50
Owensby Hospital	35	21
Pratt, 5,111—Pratt		
The Ninnesch Hospital	22	15
Winfield, 7,933—Cowley		
St. Mary's Hospital	50	25
Winfield Hospital	25	15
Five General Hospitals of less than 10 beds	32	18
Total for community use, 112	4,416	2,501

KANSAS



● Hospital for community use.
✚ Tuberculosis Hospital.
▲ Nervous and Mental Hospital.
○ ✣ △ Established since 1920.

In Kansas the following forty-four counties have no hospitals for community use: Anderson, Barber, Chase, Chautauqua, Cheyenne, Clark, Coffey, Comanche, Decatur, Doniphan, Edwards, Gove, Graham, Grant, Gray, Greeley, Greenwood, Hamilton, Haskell, Hodgeman, Jackson, Jefferson, Jewell, Kearny, Kiowa, Lane, Linn, Logan, Meade, Morton, Ness, Pottawatomie, Rooks, Russell, Sheridan, Stanton, Stevens, Thomas, Trego, Wabaunsee, Wallace, Washington, Wichita, Woodson.

Total hospitals in Kansas, 147; for community use, 112; population per hospital bed, 410; percentage of beds occupied, 56; percentage of counties without hospitals, 41.9.

	Total Beds	Av. Beds in Use
Independence, 10,900—Montgomery		
West Side Hospital	35	25
Junction City, 7,533—Geary		
Junction City Municipal Hosp.	30	10
Kansas City, 116,053—Wyandotte		
Bell Memorial Hospital ★	120	96
Bethany Methodist Hospital	120	99
Douglass Hospital	21	16
Grandview Sanitarium (N.& M.)	38	26
Providence Hospital	65	40
St. Margaret's Hospital ★	400	98
Kingman, 2,407—Kingman		
Kingman Hospital	12	8
LaCrosse, 808—Rush		
Baker Hospital	21	6
Larned, 3,139—Pawnee		
Larned Hospital	20	10
Lawrence, 12,341—Douglas		
Lawrence Hospital	25	12
Lawrence Memorial Hospital	25	12
McConnell Hospital	25	5
Simmons Hospital	14	8
Leavenworth, 20,889—Leavenworth		
County Hospital	20	15
Cushing Hospital	20	10
Elmwood Hospital (N.& M.)	20	15
St. John's Hospital	75	50
Lebanon, 822—Smith		
Lebanon Hospital	20	5
Liberal, 3,613—Seward		
Epworth Hospital	50	20
Lincoln, 1,613—Lincoln		
Dr. Cole's Sanitarium	16	7
Little River, 749—Rice		
Hoffman Memorial Hospital	15	10
Lyons, 2,516—Rice		
Lyons Hospital	18	5
Manhattan, 7,989—Riley		
Charlotte Swift Memorial Hosp.	21	15
Park View Hospital	15	11
Marion, 1,928—Marion		
Marion Hospital	10	5
Marysville, 3,048—Marshall		
Mary Marshall Hospital	10	4
McPherson, 4,595—McPherson		
McPherson County Hospital	50	24
Moline, 950—Elk		
Shaffer Hospital	18	5
Mulvane, 1,002—Sumner		
Atchison, Topeka and Santa Fe Hospital	40	25
Neodesha, 3,943—Wilson		
Wilson Co. Hospital	45	10
Newton, 9,781—Harvey		
Axtell Christian Hospital	50	28
Bethel Deaconess Hospital	45	22
Norton, 2,186—Norton		
Norton Methodist Hospital	31	18
Osborne, 1,635—Osborne		
Nye Hospital	10	4
Ottawa, 9,018—Franklin		
Ottawa Community Hospital	20	14
Sabetha, 2,003—Nemaha		
St. Anthony Murdock Mem. Hospital	50	28
Salina, 15,624—Saline		
Asbury Protestant Hospital	27	23
St. John's Hospital	65	24
Smith Center, 1,567—Smith		
Funks Private Hospital	10	3
Stafford, 1,752—Stafford		
Butler Hospital	16	8
Sterling, 2,060—Rice		
Sterling Hospital	20	7

KENTUCKY

● Hospital for community use.
✚ Tuberculosis Hospital.
▲ Nervous and Mental Hospital.
○ ✣ △ Established since 1920.

Total hospitals in Kentucky, 117; for community use, 86; population per hospital bed, 548; percentage of beds occupied, 57; percentage of counties without hospitals, 59.1.

	Total Beds	Av. Beds in Use
Topeka, 55,411—Shawnee		
A.T.& S.F. Railway Hospital	100	85
Christ's Hospital	52	35
Hillcrest Sanatorium (T.B.)	45	40
Jane C. Stormont Hospital	48	30
Menninger Psychiatric Hospital and Sanitarium	15	10
St. Francis' Hospital	75	65
Wellington, 7,048—Sumner		
Hatcher Hospital	30	18
St. Luke's Hospital	20	8
Wichita, 88,367—Sedgwick		
The Coffman Hospital	15	9
Kansas Sanitarium and Hosp.	60	45
Sedgwick Co. Tuberculosis Sanatorium	25	20
St. Francis' Hospital ★	220	172
Wesley Hospital ★	125	93
Wichita Hospital ★	135	76

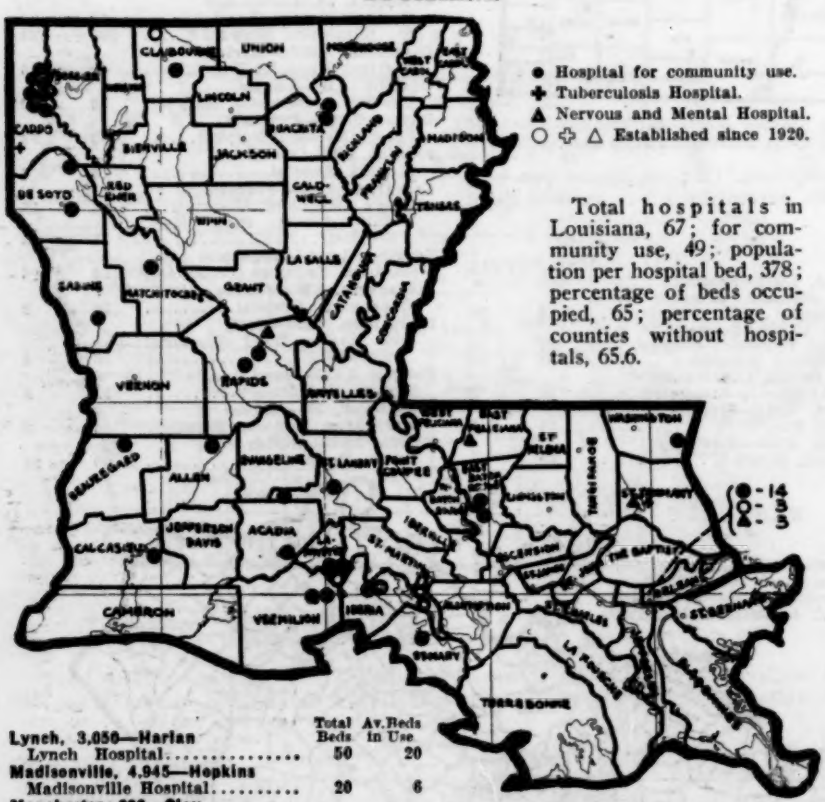
KENTUCKY

	Total Beds	Av. Beds in Use
Ashland, 24,435—Boyd		
Baptist General Hospital, Inc.	66	30
King's Daughters' Hospital	42	26
Barbourville, 1,877—Knox		
The Logan Hospital	20	6
Berea, 1,640—Madison		
Berea College Hospital	50	18
Robinson Hospital	35	11
Bowling Green, 9,638—Warren		
Blackburn Hospital	12	4
Covington, 58,309—Kenton		
Booth Memorial Hospital	50	35
St. Elizabeth's Hospital ★	300	180
Cynthiana, 3,857—Harrison		
Harrison Memorial Hospital	40	15
Danville, 5,034—Boyle		
Danville & Boyle Co. Hospital	50	20
Dayton, 7,646—Campbell		
Speer's Memorial Hospital	100	58
Fleming, 887—Letcher		
Fleming Hospital	10	4
Frankfort, 9,805—Franklin		
King's Daughters' Hospital	24	15
Winnie Annett Scott Mem. Hospital	11	5
Franklin, 3,154—Simpson		
Southern Kentucky Sanatorium	50	25
Frenchburg, 270—Menifee		
Frenchburg Hospital	10	2
Georgetown, 3,903—Scott		
John Graves Ford Memorial Hospital	30	4
Glasgow, 2,559—Barren		
Maplewood Infirmary	12	8
Gray Hawk, 70—Jackson		
Mary Allen Memorial Hospital	16	3
Harlan, 2,647—Harlan		
Harlan Hospital	50	22
Harrodsburg, 3,765—Mercer		
A. D. Price Memorial Hospital	20	8
Hazard, 4,348—Perry		
Hazard Hospital	42	22
Henderson, 12,574—Henderson		
Henderson Hospital, Inc.	25	10
Moseley Hospital, Inc	25	11
Hopkinsville, 9,696—Christian		
Jennie Stuart Memorial Hospital	27	14
Jackson, 1,503—Breathitt		
Bach Hospital	35	17
Jackson City Hospital	10	New
Jenkins, 4,707—Letcher		
Jenkins Hospital	50	15
Kenvir, —— —Harlan		
Black Mountain Hospital	16	4
La Grange, 1,066—Oldham		
Blaydes Private Hospital	10	New

	Total Beds	Av. Beds in Use
Lebanon, 3,239—Marion		
Boldrick Infirmary	14	6
Elizabeth's Hospital	16	4
Lexington, 46,895—Fayette		
Good Samaritan Hospital ★	125	90
High Oaks Sanatorium (N.& M.)	35	18
Julius Marks Sanatorium (T.B.)	90	56
St. Joseph's Hospital	175	135
London, 1,707—Laurel		
Pennington General Hospital	50	New
Louisville, 305,935—Jefferson		
Beechhurst Sanit. (N.& M.)	50	35
Children's Free Hospital	72	62
Jewish Hospital	64	54
John N. Norton Memorial Infirmary	100	65
Kentucky Baptist Hospital	90	76
Louisville City Hospital ★†	474	270
Louisville Neuropathic Sanat.	24	22
Maple Heights Sanatorium & Hospital	18	10
Methodist Episcopal Deaconess Hospital	76	60
Mt. St. Agnes Sanit. (N.& M.)	48	30
Pope Sanitarium	25	22
Red Cross Hospital	40	25
St. Anthony's Hospital ★	209	96
St. Joseph's Infirmary	100	75
SS. Mary & Elizabeth Hosp ★	145	120
Dr. Stokes Sanat. (N.& M.)	35	20
Susan Speed Davis Hospital	35	20
Wm. H. Emrich Hospital	14	7
Princeton, 3,689—Caldwell		
Annie Barber Hospital	15	New
Richmond, 5,622—Madison		
Gibson Hospital	25	20
Pattie A. Clay Infirmary	20	12
Shelbyville, 3,760—Shelby		
King's Daughters' Hospital	35	15
Somerset, 4,672—Pulaski		
Pulaski County Hospital	18	10
Somerset General Hospital	24	12
Valley Station, 200—Jefferson		
Waverly Hill Sanat. (T.B.)	210	205
Versailles, 2,061—Woodford		
Woodford Co. Memorial Hospital	14	9
Winchester, 7,866—Clark		
Clark County Hospital	25	10
Three General Hospitals of less than 10 beds	20	5
Total for community use, 86	4,540	2,613

In Kentucky the following seventy-five counties have no hospitals for community use: Adair, Allen, Anderson, Ballard, Bath, Boone, Bracken, Breckinridge, Bullitt, Butler, Caldwell, Carlisle, Carroll, Carter, Casey, Clay, Clinton, Crittenden, Cumberland, Edmunson, Elliott, Estill, Fleming, Floyd, Fulton, Gallatin, Garrard, Grant, Grayson, Green, Greenup, Hancock, Hardin, Hart, Henry, Hickman, Jessamine, Larue, Lee, Leslie, Lewis, Livingston, Logan, Lyon, Lynch, 3,050—Harlan

LOUISIANA



● Hospital for community use.
✚ Tuberculosis Hospital.
▲ Nervous and Mental Hospital.
○ ✚ △ Established since 1920.

Total hospitals in Louisiana, 67; for community use, 49; population per hospital bed, 378; percentage of beds occupied, 65; percentage of counties without hospitals, 65.6.

	Total Beds	Av. Beds in Use
Lynch, 3,050—Harlan		
Lynch Hospital	50	20
Madisonville, 4,945—Hopkins		
Madisonville Hospital	20	6
Manchester, 626—Clay		
Anderson & Ricketts Hospital	10	New
Minor Hospital	20	7
Mayfield, 6,583—Graves		
The Mayfield Hospital	30	10
Maysville, 8,107—Mason		
Hayswood Hospital	35	35
Middlesboro, 8,041—Bell		
Brosheer-Brummett Hospital	50	16
Mt. Sterling, 3,995—Montgomery		
Mary Chiles Hospital	16	5
Murray, 2,415—Calloway		
Wm. Mason Memorial Hospital	75	42
Owensboro, 22,027—Daviess		
Owensboro City Hospital	85	35
Paducah, 25,852—McCracken		
Highland Sanatorium (T.B.)	16	6
Illinois Central Hospital	90	47
Riverside Hospital	100	50
Paintsville, 1,383—Johnson		
Paintsville Hospital	30	15
Paris, 6,310—Bourbon		
Massie Memorial Hospital	44	20
Pikeville, 2,110—Pike		
Methodist Hospital of Kentucky	54	20
Pineville, 2,908—Bell		
Continental Miners' Hospital	12	5
Wilson Hospital	15	5

McCreary, McLean, Magoffin, Marshall, Martin, Meade, Metcalfe, Monroe, Morgan, Muhlenberg, Nicholas, Ohio, Oldham, Owen, Owsley, Pendleton, Powell, Robertson, Rockcastle, Russell, Spencer, Taylor, Todd, Trigg, Trimble, Union, Washington, Wayne, Webster, Whitley, Wolfe.

LOUISIANA

	Total Beds	Av. Beds in Use
Abbeville, 3,461—Vermilion		
La Grande Hospital	20	16
Vermilion Sanitarium	20	4
Alexandria, 20,651—Rapides		
Baptist Hospital	60	34
Baton Rouge, 27,832—E. Baton Rouge		
Baton Rouge General Hospital	30	15
Our Lady of the Lake Sanitarium	100	45
Bogalusa, 8,245—Washington		
Eliz. Sullivan Memorial Hospital	80	66
Covington, 2,942—St. Tammany		
The Dradom Tuberculosis Sanatorium	16	5
Crowley, 6,108—Acadia		
Crowley Sanitarium Co. Ltd.	16	10
De Ridder, 3,535—Beauregard		
Dr. Ridder Sanitarium	16	6
Elizabeth, 3,000—Allen		
Elizabeth Hospital	18	12
Eunice, 3,272—St. Landry		
Eunice Sanitarium	24	6
Fisher, 1,200—Sabine		
West Louisiana Sanitarium	35	10
Greenwood, 250—Caddo		
Pines Sanatorium (T.B.)	80	45
Haynesville, 903—Claiborne		
Haynesville Hospital	36	10
Homer, 3,305—Claiborne		
Homer Sanitarium	10	5
Hygeia, —— —St. Tammany		
Camp Hygeia, Orleans Anti-Tuberculosis League	50	40
Lafayette, 7,855—Lafayette		
Lafayette Sanitarium, Inc.	23	9
St. John Hospital	33	20
Lake Charles, 14,015—Calcasieu		
St. Patrick Sanitarium	75	30
Lecompte, 1,034—Rapides		
Lecompte Sanitarium	10	8
Mansfield, 2,564—De Soto		
Mansfield Sanitarium	32	20
Monrée, 14,347—Ouachita		
Riverside Sanitarium, Inc.	50	35
St. Francis' Sanitarium	125	69
Natchitoches, 3,388—Natchitoches		
Natchitoches Sanitarium	25	14
New Iberia, 6,278—Iberia		
Dauterive Sanitarium	15	8
New Orleans, 414,493—Orleans		
Baptist Hospital	218	New
City Hospital (N.& M.)	100	80
Charity Hospital of Louisiana ★	1,300	1,189
E. E. N. & T. Hospital	66	17
Flint-Goodrich Hospital	51	30
Hotel Dieu Hospital ★	269	170
Illinois Central R.R. Hospital	60	35
Leonce M. Soniat Mercy Hosp.	64	55
Louisiana Retreat (N.& M.)	240	240
New Orleans Convalescent Home	30	23
New Orleans Hospital & Dispensary for Women and Children	35	27
Presbyterian Hospital	100	67
Southern Baptist Hospital	218	New
St. Rita Surgical Infirmary	50	25
Touro Infirmary ★	366	208
Opelousas, 4,437—St. Landry		
St. Landry Sanitarium	20	15
Patterson, 2,538—St. Mary		
St. Mary's Hospital	30	22
Shreveport, 57,857—Caddo		
Highland Sanitarium, Inc.	85	51
Mercy Sanitarium (Colored)	18	2
North Louisiana Sanitarium	100	75
T. E. Schumpert Memorial Sanitarium ★	200	115
Shreveport Charity Hospital ★	218	199
Shriners Hospital for Crippled Children	55	54
Tri-State Sanitarium	75	30
Total for community use, 49	4,967	3,271

In Louisiana the following forty-two parishes have no hospitals for community use: Ascension, Assumption, Avoyelles, Bienville, Bossier, Caldwell, Cameron, Catahoula, Concordia, East Carroll, Evangeline, Franklin, Grant, Iberville, Jackson, Jefferson, Jefferson Davis, LaSalle, Lafourche, Lincoln, Livingston, Madison, Morehouse, Plaquemines, Pointe Coupee, Red River, Richland, St. Bernard, St. Charles, St. Helena, St. James, St. John the Baptist, Tangipahoa, Tensas, Terrebonne, Union, Vernon, Webster, West Baton Rouge, West Carroll, West Feliciana, Winn.

MAINE

	Total Beds	Av. Beds in Use
Auburn, 18,073—Androscoggin		
Auburn Private Hospital	10	3
Augusta, 14,625—Kennebec		
Augusta General Hospital	100	49
Bangor, 26,644—Penobscot		
The Bangor Sanatorium (T.B.)	25	20
Eastern Maine General Hosp. ★	130	103
Paine Private Hospital	22	15
Bar Harbor, 1,181—Hancock		
Bar Harbor Medical & Surgical Hospital	33	11
Bath, 17,751—Sagadahoc		
Bath City Hospital	50	30
Belfast, 5,083—Waldo		
Bradbury Memorial Hospital	21	12
Waldo Co. General Hospital	18	10
Biddeford, 18,532—York		
Trull Hospital	40	30
Webber Hospital	50	29
Brewer, 6,064—Penobscot		
Russell Private Hospital	15	10
Calais, 6,084—Washington		
Calais Hospital	52	26
Caribou, 6,018—Aroostook		
Cary Hospital	25	14

MAINE

● Hospital for community use.
✚ Tuberculosis Hospital.
▲ Nervous and Mental Hospital.
○ ✚ △ Established since 1920.

Total hospitals in Maine, 70; for community use, 52; population per hospital bed, 362; percentage of beds occupied, 61; percentage of counties without hospitals, 0.0.

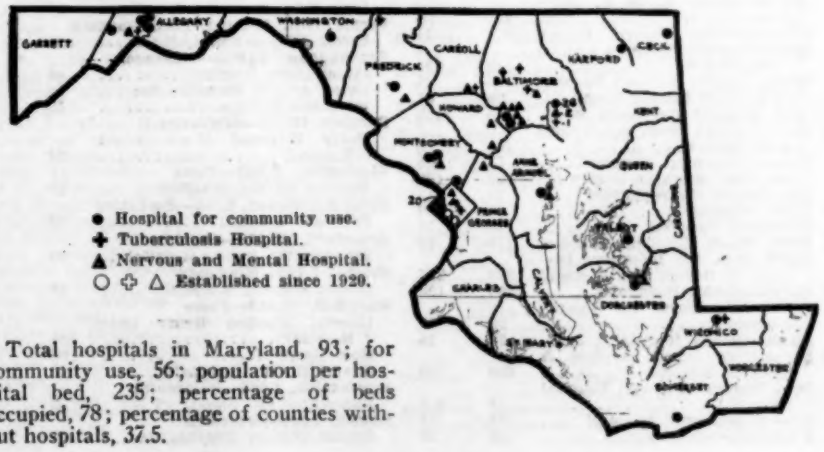
	Total Beds	Av. Beds in Use
Dexter, 4,136—Penobscot		
Plummer Memorial Hospital	20	10
Dover-Foxcroft, 2,071—Piscataquis		
The Cary Hospital	12	6
Eagle Lake, 700—Aroostook		
Northern Maine General Hosp.	30	15
East Parsonfield, 300—York		
Maple Crest Sanatorium (T.B.)	50	25
Farmington, 1,650—Franklin		
Franklin Hospital	12	8
Ft. Fairfield, 1,993—Aroostook		
Community Hospital	25	7
Gardiner, 5,475—Kennebec		
Gardiner General Hospital	23	10
Greenville Junction, 330—Piscataquis		
Charles A. Dean Hospital	23	9
Houlton, 6,191—Aroostook		
Aroostook Hospital	35	19
Madigan Memorial Hospital	50	13
Lewiston, 34,932—Androscoggin		
Central Maine General Hosp.★	110	78
St. Mary's General Hospital	140	80
Portland, 75,333—Cumberland		
Dr. Black's Private Maternity Hospital	10	5
Children's Hospital	70	55
Dr. Leighton's Maternity Hosp.	14	9
Maine Eye and Ear Infirmary	90	85
Maine General Hospital ★	160	94
Portland City Hospital	85	80
Queen's Hospital	60	40
St. Barnabas Hospital	50	43
State Street Hospital	50	38
Dr. C. P. Wescott Sanatorium	14	9
Presque Isle, 3,452—Aroostook		
Presque Isle General Hospital	50	35
Rockland, 8,109—Knox		
Knox Co. General Hospital	38	26
Rumford, 7,016—Oxford		
Rumford Hospital Association	32	26
Skowhegan, 5,981—Somerset		
Kennebec Valley Hospital	30	13
Somerset Hospital, Inc.	25	16
South Paris, 1,793—Oxford		
The Beeches	30	15
Union, 1,200—Knox		
Jones Sanitarium (N.& M.)	30	25
Waterville, 14,424—Kennebec		
Elm City Hospital	20	17
Sisters Hospital	100	25
West Boothbay Harbor, —— —Lincoln		
St. Andrew's Hospital	17	5
Westbrook, 9,435—Cumberland		
Westbrook Hospital	18	10
York Village, 1,000—York		
York Hospital	12	7
Four General Hospitals of less than 10 beds	27	9
Total for community use, 52	2,153	1,329

All counties in Maine have hospitals.

MARYLAND

	Total Beds	Av. Beds in Use
Annapolis, 12,633—Anne Arundel		
Annapolis Emergency Hospital	42	35
Baltimore, 796,296—Baltimore City		
Baltimore City Hosp.★ (General)	371	303
Baltimore City Hospitals (N.& M.)	300	318
Baltimore City Hospitals (T.B.)	175	82
Baltimore E. E. and T. Charity Hospital	50	18
Bon Secours Hospital	75	24
Children's Hospital School, Inc.	120	88
Church Home and Infirmary ★	157	123
Colonial Hospital	78	58
Franklin Square Hospital ★	110	74
Happy Hills	20	17
Hebrew Hospital and Asylum ★	155	140
Home for Incurables	53	53
Homewood Hospital	52	30
Hospital for Women	100	99
Howard A. Kelly Hospital	30	20
Jas. Lawrence Kernan Hospital	60	55
Johns Hopkins Hospital ★ †	743	542
Maryland General Hospital ★	198	176
Mercy Hospital ★	255	220
Mt. Hope Retreat (N.& M.)	690	686
Presbyterian E. E. and T. Charity Hospital	50	10
Provident Hospital & Dispensary	50	28
South Baltimore General Hosp.	60	50
Southern Hospital of Baltimore	30	18
St. Agnes' Hospital ★	185	129
St. Joseph's Hospital ★	250	240
Sydenham Hospital	110	37
Union Memorial Hospital ★	149	123
University of Maryland Hosp.★	250	200
West Baltimore General Hospital	150	90
Cambridge, 7,467—Dorchester		
Cambridge-Maryland Hospital	75	35
Catonsville, 4,560—Baltimore		
Gundry Sanitarium (N.& M.)	50	46
Harlem Lodge (N.& M.)	36	18
Pearson Home	20	8
Sieling's Sanatorium (N.& M.)	25	15
Crisfield, 4,116—Somerset		
Edw. W. McCready Memorial Hospital	34	18
Cumberland, 33,741—Allegany		
Allegany Hospital	100	70
Sylvan Retreat (N.& M.)	96	70
Easton, 3,442—Talbot		
Easton Emergency Hospital	50	38
Elkton, 2,660—Cecil		
Union Hospital	45	28
Forest Glen, 125—Montgomery		
Carroll Springs Sanitarium	25	15
Frederick, 12,035—Frederick		
Frederick City Hospital	80	50
Hagerstown, 31,357—Washington		
Washington Co. Hospital	106	70
Havre de Grace, 4,374—Harford		
Havre de Grace Hospital	42	15

MARYLAND



● Hospital for community use.
✚ Tuberculosis Hospital.
▲ Nervous and Mental Hospital.
○ ✚ △ Established since 1920.

Total hospitals in Maryland, 93; for community use, 56; population per hospital bed, 235; percentage of beds occupied, 78; percentage of counties without hospitals, 37.5.

	Total Beds	Av. Beds in Use
Ijamsville, 71—Frederick		
Riggs Cottage Sanitarium (N.& M.)	20	20
Laurel, 2,239—Prince Georges		
Laurel Sanitarium, Inc. (N.& M.)	75	65
Olney, —— —Montgomery		
Montgomery Co. General Hosp.	28	20
Orange Grove, (Ilchester P.O.)—Baltimore		
St. Gabriel's Home	35	27
Relay, 2,000—Baltimore		
Relay Sanitarium (N.& M.)	46	35
Rockville, 1,145—Montgomery		
Chestnut Lodge Sanitarium (N.& M.)	25	23
Waverley Sanatorium	12	5
Salisbury, 7,502—Wicomico		
Peninsula General Hospital	94	65
Sparks, —— — Baltimore		
Maple Heights Sanat. (T.B.)	14	8
Towson, 3,500—Baltimore		
Hospital for Consumptives of Md.	130	113
Sheppard and Enoch Pratt Hosp. (N.& M.)	150	139
Total for community use, 56	6,531	5,102

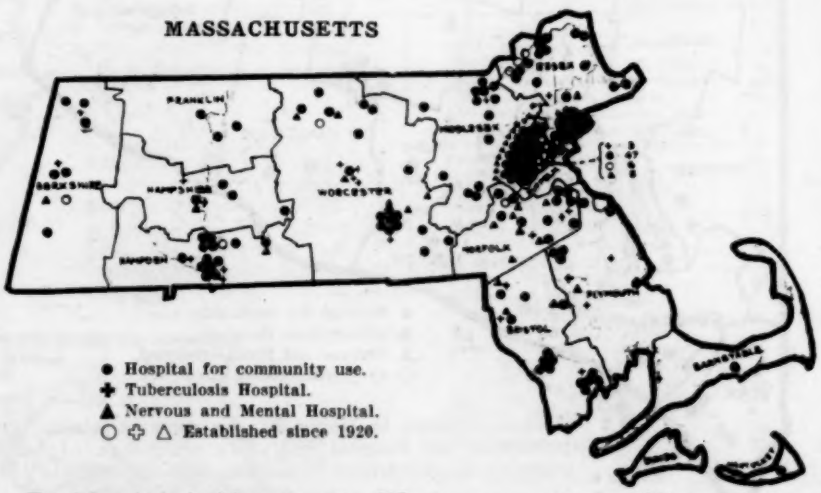
In Maryland the following nine counties have no hospitals for community use: Calvert, Caroline, Charles, Garrett, Harford, Kent, Queen Annes, St. Marys, Worcester.

MASSACHUSETTS

	Total Beds	Av. Beds in Use
Adams, 13,525—Berkshire		
W. B. Plunkett Memorial Hosp.	35	22
Allerton, 300—Plymouth		
Dr. C. P. Sylvesters Private Hospital	12	6
Amherst, 5,112—Hampshire		
Rangeview Sanitarium	15	12
Arlington, 25,155—Middlesex		
Symmes Arlington Hospital	41	28
Dr. Young's Hospital	15	6
Arlington Heights, 1,900—Middlesex		
Ring Sanat. and Hosp. (N.& M.)	60	48
Attleboro, 20,625—Bristol		
Bristol Co. Tuberculosis Hosp.	60	53
Sturdy Memorial Hospital	50	42
Baldwinsville, 2,077—Worcester		
Hospital Cottages for Children	140	93
Beverly, 22,701—Essex		
Beverly Hospital Corp.	100	61
Boston, 781,529—Suffolk		
Adams Nervine	36	31
Bay State Hospital, Inc.	21	15
Beth Israel Hospital	50	45
Boston City Hospital ★	806	771
Boston Dispensary and Hospital	32	24
Boston Lying-in Hospital	100	65
Boston Sanatorium (T.B.)	416	350
Carney Hospital ★	200	143
Channing Home (T.B.)	22	22
Children's Hospital	195	145
Collis P. Huntington Mem. Hosp	22	18
Convalescent Home of the Boston Hospital	34	11
Dorchester Cottage Hospital	10	8
East Boston Relief Station	11	6
Eliot Hospital	27	15
Elm Hill Private Hospital	22	12
Emerson Hospital	60	30
Faulkner Hospital	54	52
Fenway Hospital, Inc.	38	30
Glenside Hospital (N.& M.)	20	18
Harley Private Hospital	62	53
Hart Private Hospital, Inc.	50	30
Haymarket Square Relief Station	34	11
House of the Good Samaritan	75	60
Infant's Hospital	65	45
MacLeod Hospital	25	12
Massachusetts E. & E. Infirmary †	209	150
Massachusetts General Hosp.★	377	314
Massachusetts Homeopathic Hospital ★	544	429
Massachusetts Women's Hospital	35	25
New England Baptist Hospital	100	61
New England Deaconess Hosp.	165	126
New England Hosp. for Women & Children ★	155	76
Palmer Memorial Hospital	75	60
Peter Bent Brigham Hosp.★ †	223	199
Prendergast Preventorium	21	15
Reede Hospital	30	20
Riverbank Hospital	35	10
Robt. Breck Brigham Hospital	110	90
South Dept. for Infectious Diseases of Boston City Hospital	338	225
St. Elizabeth's Hospital ★	200	194
St. Luke's Home for Convalescents	25	16
St. Margaret's Hospital	30	15
St. Mary's Infant Asylum & Lying-In Hospital	150	100
Dr. Taylor's Private Hospital (N.& M.)	18	6
Vincent Memorial Hospital	22	16
Washingtonian Home	50	20

	Total Beds	Av. Beds in Use
Brockton, 65,731—Plymouth		
Brockton Hospital ★	127	93
Goddard Hospital, Inc.	65	41
Moore Hospital	25	15
Brookline, 42,633—Norfolk		
Board of Health Hospital	60	20
Bournewood Hospital (N.& M.)	18	16
Brooks Hospital	50	22
Corey Hill Hospital	34	34
Free Hospital for Women	97	52
Summit Hospital	35	30
Trumbull Hospital	45	30
Cambridge, 120,053—Middlesex		
Cambridge City Hospital	114	89
Cambridge Hospital ★	125	100
Cambridge Relief Hospital	35	28
Cambridge Tuberculosis Hospital	125	42
Charlesgate Hospital	65	50
Chester Hospital, Inc.	45	35
Middlesex Charitable Infirmaries	50	29
Chelsea, 47,505—Suffolk		
Chelsea Memorial Hospital	60	60
Chicopee, 41,888—Hampden		
Health Department Hospital (T.B.)	28	12
Chicopee Falls, 11,500—Hampden		
Bellevue Hospital, Inc.	25	15
Clinton, 14,180—Worcester		
Clinton Hospital	85	35
Concord, 6,461—Middlesex		
Emerson Hospital in Concord	27	18
Dartmouth, —— —Bristol		
Crary Hospital	25	16
East Bridgewater, 3,363—Plymouth		
The Millet Sanatorium (N.& M. & T.B.)	40	15

	Total Beds	Av. Beds in Use
Holyoke, 60,892—Hampden		
Carpenter Isolation Hospital	20	4
Holyoke City Hospital	134	90
Holyoke Sanatorium (T.B.)	56	39
Providence Hospital	115	95
Ipswich, 5,777—Essex		
Benj. Stickney Cable Memorial Hospital	20	16
Lawrence, 95,136—Essex		
Clover Hill Hospital	20	11
Lawrence General Hospital ★	130	84
Lawrence Municipal Hospital	70	60
South Lawrence Hospital	10	5
Lee, 4,085—Berkshire		
Mountain View Farm for Convalescents	18	9
Leominster, 22,104—Worcester		
Leominster Hospital	50	30
Lowell, 110,542—Middlesex		
Chelmsford Street Hospital	90	45
Lowell Corporation Hospital ★	100	73
Lowell General Hospital ★	120	78
Lowell Tuberculosis Hospital	54	49
Shaw Hospital	16	7
St. John's Hospital ★	124	73
Ludlow, 7,470—Hampden		
Ludlow Hospital	25	13
Lynn, 103,147—Essex		
Lynn Hospital ★	136	82
Union Hospital, Inc.	65	41
Malden, 51,789—Middlesex		
Glenrock Hospital (T.B.)	100	75
Malden Hospital	100	83
Marblehead, 7,324—Essex		
Children's Island Sanitarium	98	76
Devereux Mansion, Inc.	45	23



Total hospitals in Massachusetts, 305; for community, use, 221; population per hospital bed, 250; percentage of beds occupied, 70; percentage of counties without hospitals, 28.9.

	Total Beds	Av. Beds in Use
Everett, 42,072—Middlesex		
Everett Cottage Hospital	40	25
Fall River, 129,662—Bristol		
Fall River General Hospital ★	126	101
Fall River General Hospital (T.B.)	108	63
St. Ann's Hospital	80	40
Truesdale Hospital, Inc.	88	78
Union Hospital ★	150	114
Fitchburg, 44,034—Worcester		
Burbank Hospital ★	115	91
Lucy Helen Memorial Hospital	14	7
Forest Hills, (Boston, P.O.)—Suffolk		
Forest Hills Hospital, Inc.	125	37
Framingham, 21,078—Middlesex		
Framingham Hospital	60	48
Union Avenue Hospital, Inc.	65	52
Woodside Cottages	15	8
Gardner, 18,770—Worcester		
Henry Heywood Memorial Hospital	84	51
Gloucester, 23,407—Essex		
Addison Gilbert Hospital	50	17
Great Barrington, 6,315—Berkshire		
Fairview Hospital	20	13
Greenfield, 15,246—Franklin		
Franklin Co. Public Hospital	70	43
Groton, 2,155—Middlesex		
Groton General Hospital	15	9
Haverhill, 49,084—Essex		
General Stephen Henry Gale Hospital	105	65
Hale Hospital	65	40
Haverhill City Hospital	40	20
Haydenville, 1,245—Hampshire		
Hampshire Co. Sanat. (T.B.)	70	51
Holden, 2,970—Worcester		
Holden District Hospital, Inc.	25	20

	Total Beds	Av. Beds in Use
Marlboro, 16,236—Middlesex		
Marlboro Hospital	58	30
Medford, 47,627—Middlesex		
Dearborn Hospital	25	14
Lawrence Memorial Hospital	58	26
Medford Hospital	25	10
Melrose, 20,148—Middlesex		
Melrose Hospital	59	59
New England Sanitarium & Hospital	150	65
Melrose Highlands, 4,000—Middlesex		
Dr. Reeves Nervine (N.& M.)	15	10
Methuen, 20,660—Essex		
Mary E. Barr Sanitarium	25	18
Middleboro, 8,214—Plymouth		
St. Luke's Hospital	18	10
Middleton, 1,195—Essex		
Essex Sanatorium (T.B.)	208	169
Milford, 14,781—Worcester		
Milford Hospital	45	32
Milton, 9,382—Norfolk		
Milton Hospital	28	21
Montague City, —— —Franklin		
Farren Memorial Hospital	50	40
Nantucket, 2,962—Nantucket		
Nantucket Cottage Hospital	18	10
Natick, 12,816—Middlesex		
Leonard Morse Hospital	40	30
Needham, 7,012—Norfolk		
Clover Hospital	11	5
New Bedford, 120,494—Bristol		
Acushnet Sanitarium	21	12
Pine Lawn Sanitarium	20	10
Sassaquim Sanatorium (T.B.)	116	104
St. Luke's Hospital ★	255	172
Union Hospital	40	32
Newburyport, 15,656—Essex		
Ann Jaques Hospital	67	45
Newburyport Homeopathic Hosp.	28	18

	Total Beds	Av. Beds in Use
Newton, 53,364—Middlesex		
Belger Hospital	14	10
Dr. Mellus' Private Hospital (N.& M.)	20	13
Newton Hospital *	177	113
North Adams, 22,717—Berkshire		
North Adams Hospital	188	50
Dr. Vrooman's Sanitarium	25	12
Northampton, 24,000—Hampshire		
Cooley Dickinson Hospital	92	72
North Dighton, —— — Bristol		
Mt. Hope Hospital	15	4
Norwood, 14,183—Norfolk		
Norwood Hospital	35	33
Palmer, 9,896—Hampden		
Wing Memorial Hospital	20	15
Peabody, 20,107—Essex		
Josiah B. Thomas Hospital	40	34
Pittsfield, 47,241—Berkshire		
Hillcrest Hospital	37	33
House of Mercy Hospital *	175	80
Plymouth, 13,178—Plymouth		
Jordan Hospital	66	33
Pocasset, 200—Barnstable		
Barnstable County Sanat. (T.B.)	32	24
Quincy, 60,131—Norfolk		
Quincy City Hospital	70	57
Whitehouse Maternity Hospital	12	8
Rutland, 1,225—Worcester		
Central New England Sanatorium (T.B.)	55	34
Summit Cottage	10	10
Wachusett Cottage (T.B.)	15	12
Salem, 42,821—Essex		
Health Dept. Hospital for Contagious Diseases	60	25
North Shore Babies Hospital	40	21
Salem Hospital *	112	100
Scituate, 1,129—Plymouth		
Children's Sunlight Hospital	58	30
Sharon, 2,310—Norfolk		
Sharon Sanatorium (T.B.)	45	36
Somerville, 99,206—Middlesex		
Chandler Street Hospital	15	5
City of Somerville Contagious Disease Hospital	80	11
Somerville Hospital	65	51
South Braintree, 4,100—Norfolk		
Norfolk Co. Hospital	90	87
South Dartmouth, 1,218—Bristol		
Sol-e-Mar Hospital	52	37
South Hanson, 422—Plymouth		
Plymouth Co. Hospital (T.B.)	130	91
South Weymouth, 4,000—Norfolk		
Weymouth Hospital	37	15
Springfield, 142,224—Hampden		
Buscall's Nursing Home	25	19
Children's Prevent. of Hampden Co. Tuberculosis Ass'n	120	116
Health Department Hosp. (T.B.)	75	35
Mercy Hospital *	153	129
Shriners' Hospital for Crippled Children	50	New
Springfield Hospital *	188	143
Wesson Maternity Hospital	52	43
Wesson Memorial Hospital	100	75
Stockbridge, 1,779—Berkshire		
Austen Riggs Foundation, Inc. (N.& M.)	35	28
Taunton, 39,286—Bristol		
Morton Hospital	63	37
Waltham, 34,926—Middlesex		
Waltham Baby Hospital	25	7
Waltham Hospital *	104	90
Ware, 8,774—Hampshire		
Mary Lane Hospital	32	17
Waverley, 2,331—Middlesex		
McLean Hospital (N.& M.)	230	223
Wellesley, 5,413—Norfolk		
Cedar Lodge	12	6
Channing Sanitarium (N.& M.)	33	30
Schofield Hospital (N.& M.)	10	9
Wiswall Sanat., Inc. (N.& M.)	35	28
Wellesley Hills, 2,588—Norfolk		
Convalescent Home of Children's Hospital	75	52
Westfield, 19,061—Hampden		
Noble Hospital	63	43
West Medford, 4,300—Middlesex		
The Peckham Private Hospital	12	7
West Newton, —— — Middlesex		
Woodlawn Sanitarium	12	10
Westwood, 1,266—Norfolk		
Westwood Lodge (N.& M.)	10	8
Whitinsville, 5,600—Worcester		
Whitinsville Hospital	15	12
Winchendon, 5,901—Worcester		
Millers River Hospital	25	15
Winchester, 11,565—Middlesex		
Winchester Hospital	40	30
Winthrop, 16,155—Suffolk		
Winthrop Community Hospital	34	18
Woburn, 18,354—Middlesex		
Charles Choate Memorial Hosp.	40	30
Worcester, 192,242—Worcester		
Belmont Hospital (T.B.)	55	34
Fairlawn Hospital, Inc.	46	10
Harvard Private Hospital	16	14
Herbert Hall Hospital (N.& M.)	30	25
Maple Hall Sanitarium	19	10
The Memorial Hospital *	200	153
St. Vincent Hospital *	225	190
Worcester City Hospital *	400	323
Worcester Hahnemann Hospital	82	30
Three General Hospitals of less than 10 beds	25	12
Total for community use, 221	16,606	11,773

In Massachusetts the following county has no hospital for community use: Dukes.

MICHIGAN

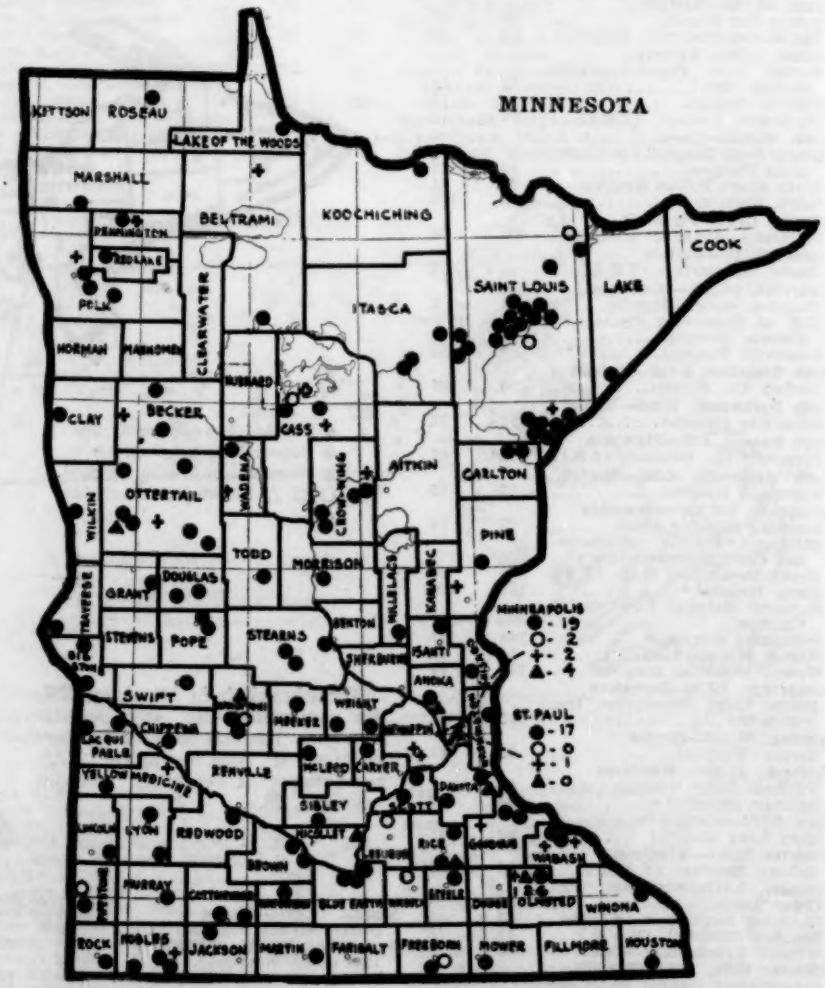
	Total Beds	Av. Beds in Use
Adrian, 12,508—Lenawee		
Emma L. Bixby Hospital	22	18
Albion, 8,354—Calhoun		
Jas. W. Sheldon Mem. Hospital	40	20
Allegan, 3,637—Allegan		
The John Robinson Hospital	20	12
Alma, 7,542—Gratiot		
Brainerd Hospital	21	4
Carney Private Hospital	20	8
Alpena, 11,101—Alpena		
Donald McRae Hospital	20	9
Ann Arbor, 22,178—Washtenaw		
The Cowie Hospital	12	9
St. Joseph's Mercy Hospital	180	150
University Hospital *	520	515
Washtenaw Private Hospital	16	6
Bad Axe, 2,140—Huron		
Hubbard Memorial Hospital	30	21
Battle Creek, 42,336—Calhoun		
Battle Creek Sanitarium *	1,000	602
Calhoun Co. Public Hosp. (T.B.)	50	36
Maple Street Hospital	18	9
Nichols Memorial Hospital	100	63
Bay City, 48,907—Bay		
Bay City General Hospital	30	18
Mercy Hospital	120	59
Samaritan Hospital	30	15
Benton Harbor, 13,959—Berrien		
Benton Harbor Hospital	40	24
Big Rapids, 4,558—Mecosta		
Big Rapids General Hospital	20	10
Cadillac, 9,734—Wexford		
Mercy Hospital	50	27
Wexford Co. Hospital	25	18
Calumet, 25,991—Houghton		
Calumet & Hecla Hospital	25	15
Charlevoix, 2,218—Charlevoix		
Charlevoix Hospital	26	6
Cheboygan, 5,642—Cheboygan		
Cayley Hospital	10	5
Coldwater, 6,114—Branch		
Wade Memorial Hospital	25	8
Crystal Falls, 3,394—Iron		
Crystal Falls General Hospital	15	9
St. Erik's Hospital	12	5
Dearborn, 2,470—Wayne		
St. Joseph's Retreat (N.& M.)	400	375
Detroit, 1,242,044—Wayne		
Children's Hosp. of Michigan †	150	138
City of Detroit Receiving Hosp.*	360	355
Delray Industrial Hospital	95	60
Detroit E. E. N. & Throat Hosp.	75	41
Detroit Tuberculosis Sanatorium	145	133
Dunbar Memorial Hospital	45	30
Evangelical Deaconess Hospital	115	108
Fenwood Hospital	10	2
The Grace Hospital *	329	272
Harper Hospital *	460	373
Henry Ford Hospital *	500	292
Herman Kiefer Hospital	700	547
Jefferson Diagnostic Hospital †	50	45
Lincoln Hospital	25	20
Michigan Mutual Hospital	40	28
Noble Sanatorium (N.& M.)	30	25
Pennsylvania Ave. Sanitarium (N.& M.)	14	10
Providence Hospital *	275	250
St. Joseph's Mercy Hospital	150	150
St. Mary's Hospital *	300	200
William Booth Memorial Hosp.	19	10
Woman's Hospital	108	65
Dowagiac, 5,440—Cass		
The Lee Sanitarium	25	18
Durand, 2,672—Shiawassee		
Durand Hospital	10	6
East Grand Rapids, 800—Kent		
Reed's Lake Sanitarium	30	20
Eaton Rapids, 2,379—Eaton		
Harriet Chapman Hospital, Inc.	20	8
Eloise, 700—Wayne		
Eloise Hospital for Mental Diseases	1,463	1,204
Eloise Infirmary	245	245
Escanaba, 13,103—Delta		
Laing Hospital	25	8
St. Francis Hospital	85	40
Farmington, 853—Oakland		
Convalescent Home	145	115
Flint, 130,316—Genesee		
Hurley Hospital *	135	91
St. Joseph Hospital	40	40
The Women's Hospital	30	23
Fremont, 2,180—Newaygo		
Gerber Memorial Hospital	10	5
Goodrich, 300—Genesee		
Goodrich General Hospital	24	16

● Hospital for community use.
✚ Tuberculosis Hospital.
▲ Nervous and Mental Hospital.
○ ✣ △ Established since 1920.

Total hospitals in Michigan, 228; for community use, 168; population per hospital bed, 297; percentage of beds occupied, 72; percentage of counties without hospitals, 28.9.

	Total Beds	Av. Beds in Use
Grand Haven, 7,224—Ottawa		
Elizabeth Hatton Memorial Hospital	20	9
Grand Rapids, 153,698—Kent		
Blodgett Memorial Hospital ★	134	109
Butterworth Hospital ★	220	197
Christian Psychopathic Hospital	110	105
Grand Rapids Tuberculosis Sanatorium	125	100
Kent Co. Detention Hospital (N.& M.)	18	7
Municipal Isolation Hospital	80	24
St. Mary's Hospital ★	115	99
Grayling, 2,450—Crawford		
Mercy Hospital	30	8
Greenville, 4,304—Montcalm		
United Memorial Hospital	15	5
Grosse Pointe Farms (Grosse Pointe P.O.), 2,084—Wayne		
Cottage Hospital	15	8
Hancock, 7,527—Houghton		
St. Joseph's Hospital	60	37
Harbor Beach, 1,928—Huron		
Harbor Beach Hospital	20	8
Hart, 1,590—Oceana		
Oceana Hospital	10	6
Hastings, 5,132—Barry		
Pennock Hospital	32	30
Highland Park, 72,289—Wayne		
Highland Park General Hosp.★	133	114
Hillsdale, 5,476—Hillsdale		
Hillsdale Hospital	18	9
Holland, 13,140—Ottawa		
Holland Hospital	15	13
Houghton, 4,455—Houghton		
Houghton Co. Tuberculosis Sanatorium	55	40
Iron Mountain, 8,251—Dickinson		
Iron Mountain General Hospital	33	25
Iron River, 4,295—Iron		
Iron River Hospital	12	5
Lakeside Hospital	15	2
Ironwood, 17,391—Gogebic		
Grand View Hospital (T.B.)	85	45
Twin City Hospital	20	15
Ishpeming, 10,500—Marquette		
Finnish Hospital	35	6
Ishpeming Hospital	33	20
Jackson, 57,972—Jackson		
W. A. Foote Memorial Hosp.★	125	76
Jackson Co. Contagious Hospital	40	16
Jackson Tuberculosis Hospital	21	18
Mercy Hospital	50	41
Kalamazoo, 53,613—Kalamazoo		
Borgess Hospital	103	74
Bronson Methodist Hospital	50	49
Fairmont Hospital (T.B.)	128	58
Lake Linden, 2,182—Houghton		
Lake Superior General Hospital	12	6
Lakeview, 886—Montcalm		
Kelsey Hospital	11	6
Lansing, 70,753—Ingham		
Ingham Sanitarium (T.B.)	62	40
Lansing City Hospital	40	8
Edw. W. Sparrow Hospital	84	57
St. Lawrence Hospital	125	50
Laurium, 6,696—Houghton		
Calumet Memorial Hospital	20	16
Ludington, 8,810—Mason		
Paulina Sterns' Hospital	25	12
Manistee, 9,698—Manistee		
Mercy Hospital and Sanitarium	60	24
Marquette, 13,406—Marquette		
Morgan Heights Tuberculosis Sanatorium	32	18
St. Luke's Hospital	52	39
St. Mary's Hospital	75	40
Marshall, 4,270—Calhoun		
Oak Lawn Hospital	12	12
Menominee, 8,907—Menominee		
St. Joseph's Hospital	75	57
Mohawk, 1,000—Keweenaw		
Mohawk Mine Hospital	20	7
Monroe, 14,224—Monroe		
Monroe Hospital	30	20
Mt. Clemens, 9,488—Macomb		
St. Joseph's Sanitarium	85	40
Munising, 5,037—Alger		
Munising Hospital	22	16
Muskegon, 43,088—Muskegon		
Hackley Hospital ★	115	72
Mercy Hospital ★	102	66
Muskegon County Tuberculosis Sanitarium	51	42
Negaunee, 7,419—Marquette		
Negaunee Hospital	18	9
Dr. Robbins' Hospital	18	7
Newberry, 2,172—Luce		
Perry-Spinks Hospital	15	10
Northville, 1,738—Wayne		
East Lawn Sanatorium (T.B.)	55	45
Spring Hills Sanatorium (T.B.)	402	376
Norway, 4,533—Dickinson		
Penn Hospital	20	7
Ontonagon, 1,406—Ontonagon		
Ontonagon Co. Tuberculosis Sanatorium	15	4
Ontonagon Hospital	12	7
Oshtemo, —— —Kalamazoo		
Pine Crest Sanatorium (T.B.)	40	35
Owosso, 14,236—Shiawassee		
Memorial Hospital	58	48
Petoskey, 5,064—Emmet		
Lockwood Hospital	25	18
Petoskey Hospital	40	24
Pinckney, 384—Livingston		
Pinckney Sanitarium	10	6
Pompeii, 300—Gratiot		
Pompeii Hospital	12	10
Pontiac, 47,455—Oakland		
Franklin Road Contagious Hosp.	25	7
Oakland Ave. Contagious Hosp.	42	20
Oakland County Tuberculosis Sanatorium	23	16
Pontiac City Hospital	65	36
Pt. Huron, 29,954—St. Clair		
Emergency Hospital	35	10
Pt. Huron Hospital	50	33
Powers, 249—Menominee		
Delta-Menominee Co. Sanatorium (T.B.)	80	64
Reed City, 1,803—Osceola		
Reed City Hospital	10	2
Saginaw, 72,100—Saginaw		
Saginaw Co. Tuberculosis Hosp.	25	20
Saginaw General Hospital ★	140	74
St. Mary's Hospital	78	55
Woman's Hospital	50	29
Three Rivers, 5,209—St. Joseph		
City Hospital	18	7
Trimountain, 2,500—Houghton		
Copper Range Hospital	25	13
Vicksburg, 1,946—Kalamazoo		
Franklin Memorial Hospital	10	6
Wakefield, 4,151—Gogebic		
Wakefield Hospital	11	5
Wyandotte, 24,471—Wayne		
John F. Eilbert Memorial Hosp.	20	11
Wyandotte Hospital	53	New
Ypsilanti, 7,413—Washtenaw		
Beyer Memorial Hospital	25	19
Nine General Hospitals of less than 10 beds	64	37
Total for community use, 168	13,947	10,177

In Michigan the following twenty-four counties have no hospitals for community use: Alcona, Antrim, Arenac, Baraga, Benzie, Clare, Gladwin, Iosco, Kalkaska, Keweenaw, Lake, Lapeer, Leelanau, Mackinac, Midland, Missaukee, Montmorency, Ogemaw, Oscoda, Otsego, Presque Isle, Roscommon, Sanilac, Tuscola.



● Hospital for community use. ▲ Nervous and Mental Hospital.
✚ Tuberculosis Hospital. ○ ✚ △ Established since 1920.

Total hospitals in Minnesota, 232; for community use, 170; population per hospital bed, 228; percentage of beds occupied, 66; percentage of counties without hospitals, 17.2.

	Total Beds	Av. Beds in Use
Sault Ste. Marie, 12,096—Chippewa		
Chippewa Co. Memorial Hosp.	53	25
South Haven, 3,829—Van Buren		
City Hospital	14	9
St. Johns, 3,925—Clinton		
St. Johns Hospital	16	11
St. Joseph, 7,251—Berrien		
St. Joseph Sanitarium	32	20
St. Louis, 3,036—Gratiot		
Park Hotel, Magnetic Mineral Springs and Sanitarium	50	30
Stambaugh, 2,263—Iron		
Stambaugh Hospital	12	6
Sturgis, 5,995—St. Joseph		
Sturgis Memorial Hospital	32	25

MINNESOTA

	Total Beds	Av. Beds in Use
Albert Lea, 8,056—Freeborn		
City and County Hospital	70	36
Alexandria, 3,399—Douglas		
St. Luke's Hospital	12	6
Anoka, 4,289—Anoka		
Dr. Kline's Sanatorium	36	20
Austin, 11,906—Mower		
St. Olaf Lutheran Hospital	52	33
Barrett, 358—Grant		
Powers Hospital	10	5
Battle Lake, 628—Otter Tail		
Otter Tail County Sanatorium (T.B.)	50	44

	Total Beds	Av. Beds in Use
Bemidji, 7,086—Beltrami		
Lutheran Hospital	50	22
Benson, 2,111—Swift		
Swift County Hospital	18	8
Biwabik, 2,024—St. Louis		
Biwabik Hospital	12	5
Braham, 511—Isanti		
Braham Hospital	15	7
Brainerd, 9,591—Crow Wing		
Northwestern Medical & Surgical Ass'n	35	14
St. Joseph's Hospital	50	30
Breckenridge, 2,401—Wilkin		
St. Francis Hospital	50	25
Buhl, 2,007—St. Louis		
Shaw Hospital	15	2
Caledonia, 1,570—Houston		
Caledonia Hospital	25	7
Canby, 1,754—Yellow Medicine		
John Swenson Memorial Hosp.	18	7
Cannon Falls, 1,315—Goodhue		
Mineral Springs Sanatorium (T.B.)	35	35
Chisholm, 9,039—St. Louis		
Rood Hospital	15	8
Cloquet, 5,127—Carlton		
Raiter Hospital	20	12
Coleraine, 1,300—Itasca		
Coleraine Hospital	18	4
Crookston, 6,825—Polk		
Bethesda Hospital	45	22
St. Vincent's Hospital	44	20
Sunnyrest Sanatorium (T.B.)	60	45
Crosby, 3,500—Crow Wing		
Cuyuna Range Hospital	15	6
Dawson, 1,511—Lac qui Parle		
Dawson Surgical Hospital	25	15
Deer Wood, 532—Crow Wing		
Deer Wood Sanatorium (T.B.)	25	25
Duluth, 110,502—St. Louis		
Duluth Hospital	20	15
Morgan Park Hospital	36	12
St. Luke's Hospital *	233	85
St. Mary's Hospital *	250	241
Ellsworth, 667—Nobles		
Ellsworth Hospital	10	3
Ely, 4,902—St. Louis		
Shipman Hospital	20	6
Eveleth, 7,205—St. Louis		
More Hospital	30	19
Fairmont, 4,630—Martin		
Fairmont Surgical Hospital	12	5
Faribault, 12,272—Rice		
St. Lucas Deaconess Hospital	50	38
Fergus Falls, 7,581—Otter Tail		
St. Luke's Hospital	50	33
Geo. B. Wright Memorial Hosp.	39	25
Frazee, 1,277—Becker		
Frazee Hospital	10	5
Glenwood, 2,187—Pope		
Glenwood Hospital	10	4
Graceville, 1,022—Big Stone		
Western Minnesota Hospital	34	19
Grand Rapids, 2,914—Itasca		
Hursh Hospital	13	9
Itasca Hospital	30	18
Granite Falls, —— —Yellow Medicine		
Riverside Sanatorium (T.B.)	50	48
Hastings, 4,571—Dakota		
Latto Hospital	21	10
Heron Lake, 922—Jackson		
Southwestern Minnesota Hosp.	12	5
Hibbing, 17,955—St. Louis		
Adams Hospital	25	12
Rood Hospital	45	22
Hutchinson, 3,379—McLeod		
Hutchinson Community Hospital	21	9
International Falls, 3,448—Koochiching		
Craig Hospital	19	10
Northern Minnesota Hospital	50	23
Lake City, 2,846—Wabasha		
Lake City Hospital	24	15
Lake Park, 700—Becker		
Sand Beach Sanatorium (T.B.)	45	35
Litchfield, 2,790—Meeker		
Litchfield Hospital	30	15
Little Falls, 5,500—Morrison		
St. Gabriel's Hospital	50	25
Long Prairie, 1,346—Todd		
Long Prairie Hospital	10	2
Luverne, 2,540—Rock		
Luverne Hospital	15	5
Madison, 1,838—Lac qui Parle		
Ebenezer Hospital	20	8
Mankato, 13,659—Blue Earth		
Immanuel Lutheran Hospital	45	39
St. Joseph's Hospital	60	50
Marshall, 3,092—Lyon		
Marshall Hospital	25	10
Minneapolis, 425,435—Hennepin		
Abbott Hospital *	100	72
Asbury Hospital *	151	75
Camden Park Hospital	12	9
Eitel Hospital	100	86
Fairview Hospital *	150	120
Hill Crest Hospital	64	40
Lutheran Deaconess Hospital	150	67
Lymanhurst Hospital (T.B.)	19	16
Maternity Hospital, Inc.	47	43
Minneapolis General Hospital *.	673	393
Minneapolis Sanitarium (N.& M.)	12	8
Minnesota Sanitarium (N.& M.)	20	15
Northwestern Hospital *	110	88
Parkview Sanatorium	130	120
Rest Hospital (N.& M.)	19	15
Shriners Hospital for Crippled Children	62	54
Southside Sanitarium (N.& M.)	18	12
St. Andrew's Hospital	32	21
St. Barnabas Hospital *	175	101
St. Mary's Hospital *	225	135
Swedish Hospital *	215	190
Thomas Tubercular Hospital	65	59
University Hospital *	183	162
Montevideo, 4,419—Chippewa		
Montevideo Hospital	25	18
Montrose, 268—Wright		
Montrose Hospital	12	5
Moorhead, 5,720—Clay		
St. Ansgars Hospital	50	25
Mountain Lake, 1,309—Cottonwood		
Bethel Deaconess Hospital	20	12
New Prague, 1,540—Le Sueur		
New Prague Community Hosp.	15	6
New Ulm, 6,745—Brown		
Union Hospital	35	22
Nopeming, —— — St. Louis		
Nopeming Sanatorium (T.B.)	210	199
Northfield, 4,023—Rice		
Northfield Hospital	15	3
Oak Terrace, —— —Hennepin		
Glen Lake Sanatorium (T.B.)	601	365
Ortonville, 1,774—Big Stone		
Ortonville Evangelical Hospital	20	16
Owatonna, 7,252—Steele		
Owatonna City Hospital	21	14
Paynesville, 1,060—Stearns		
Pilon Hospital	20	4
Pelican Rapids, 1,156—Otter Tail		
Dr. Boysen's Hospital	12	3
Perham, 1,370—Otter Tail		
St. James Hospital	25	12
Pine River, 442—Cass		
Holman Hospital	10	2
Pipestone, 3,325—Pipestone		
Ashton Memorial Hospital	50	12
Pokegama, —— —Pine		
Pokegama Sanat. Inc. (T.B.)	56	34
Princeton, 1,685—Mille Lacs		
Northwestern Hospital, Inc.	35	15
Proctor, 936—St. Louis		
Missabe Hospital	20	12
Pupesky, 75—Beltrami		
Lake Julia Tuberculosis Sanatorium	48	43
Red Wing, 8,637—Goodhue		
Red Wing Hospital	35	19
St. John's Hospital	75	37
Redwood Falls, 3,421—Redwood		
Redwood Falls Hospital	15	10
Rochester, 17,050—Olmsted		
Alfred Convalescent Hospital	50	25
Cascade Sanitarium	18	12
Colonial Hospital †	250	214
The Damon Hospital (N.& M.) †	60	44
Kahler Hospital †	208	135
The Samaritan Hospital, Inc.	120	50
St. Mary's Hospital †	515	406
Worrell Hospital and Annex †	162	125
Roseau, 1,012—Roseau		
Budd Hospital	15	8
Slayton, 1,045—Murray		
Home Hospital	27	14
Soudan, 20—St. Louis		
Soudan Hospital	12	6
Spooner, 571—Lake of the Woods		
Spooner Hospital	10	4
St. Cloud, 18,860—Stearns		
St. Raphael's Hospital	75	71
St. Paul, 246,001—Ramsey		
Ancker Hospital *	850	609
Bethesda Hospital *	108	79
Chas. T. Miller Hospital *	216	119
Children's Preventorium of Ramsey County (T.B.)	75	72
Dale Street Infirmary	76	10
Evangelical Hospital	40	20
Gillette State Hospital	250	205
Midway Hospital	20	15
Mounds Park Sanitarium *	125	104
Northern Pacific Hospital *	160	130
Mrs. Robbins Rest Home	12	10
St. John's Hospital	95	85
St. Joseph's Hospital *	224	169
St. Luke's Hospital *	156	113
St. Paul Hospital	92	66
Starbuck, 824—Pope		
Minnewaska Hospital	16	6
Stillwater, 7,735—Washington		
Lakeview Memorial Hospital	36	22
Thief River Falls, 4,685—Pennington		
Oakland Park Sanat. (T.B.)	32	31
Physicians Hospital	24	6
Tracy, 2,463—Lyon		
Tracy Hospital	11	8
Two Harbors, 4,546—Lake		
Burns & Christensen Hospital	36	21
Tyler, 858—Lincoln		
Tyler Hospital Ass'n	18	8
Virginia, 16,030—St. Louis		
Lenont Hospital	20	15
McIntyre Hospital	25	15
Wabasha, 2,622—Wabasha		
Buena Vista Sanat. (T.B.)	24	23
St. Elizabeth's Hospital	50	22
Wadena, 1,820—Wadena		
Fair Oaks Lodge Sanat. (T.B.)	30	25
Wesley Hospital	52	25
Walker, 785—Cass		
Walker Hospital	25	20
Warren, 1,772—Marshall		
Warren Hospital	46	24
Waseca, 3,908—Waseca		
Waseca Memorial Hospital	20	10
Watertown, 534—Carver		
Cottage Hospital	10	4
Wheaton, 1,337—Traverse		
Wheaton Hospital	12	7
Willmar, 5,892—Kandiyohi		
Davison Hospital	12	8
Union Clinic Hospital	18	10
Willmar Hospital	28	19
Windom, 2,123—Cottonwood		
Windom Deaconess Hospital	15	8
Winona, 19,459—Winona		
Winona General Hospital	86	60
Worthington, 3,481—Nobles		
Southwestern Minnesota Tuberculosis Sanatorium	56	48
Worthington Clinic Hospital	15	6
Worthington Hospital	12	8
Ten General Hospitals of less than 10 beds	72	32
Total for community use, 170	11,233	7,514

In Minnesota the following fifteen counties have no hospitals for community use: Aitkin, Benton, Clearwater, Cook, Dodge, Faribault, Fillmore, Hubbard, Kanabec, Kittson, Mahnomen, Norman, Renville, Sherburne, Stevens.

MISSISSIPPI

	Total Beds	Av. Beds in Use
Aberdeen, 4,071—Monroe		
Acker Hospital	10	1
Coleman Hospital	15	4
Amory, 2,861—Monroe		
Gilmore Sanitarium	30	12
Biloxi, 12,571—Harrison		
Biloxi City Hospital	35	16
Booneville, 1,495—Prentiss		
North East Mississippi Hospital	32	15
Brookhaven, 4,706—Lincoln		
King's Daughters' Hospital	30	15
Clarksdale, 7,552—Coahoma		
Clarksdale Hospital	22	6
Columbia, 2,826—Marion		
Columbia Hospital	35	25
Columbus, 11,358—Lowndes		
Columbus Hospital	30	10
Fite Hospital	25	11
Corinth, 4,946—Alcorn		
The McRae Hospital, Inc.	40	13
Greenville, 15,165—Washington		
Greenville Sanitarium	20	15
King's Daughters' Hospital (White)	45	44
King's Daughters' Hospital (Colored)	28	25
Greenwood, 7,793—Leflore		
Greenwood Colored Hospital	14	9
King's Daughters' Hospital	25	15
Gulfport, 8,157—Harrison		
King's Daughters' Hospital	118	35
Hattiesburg, 14,084—Forrest		
Methodist Hospital	35	21
South Mississippi Infirmary	60	40
Houston, 1,408—Chickasaw		
Houston Hospital, Inc.	50	22
Jackson, 23,698—Hinds		
Jackson Infirmary	85	25
Medical & Surgical Clinic	50	15
Mississippi Baptist Hospital	100	55
Mississippi State Charity Hosp.*	100	75
Laurel, 15,713—Jones		
Dr. Roland Cranford's Hospital	55	45
South Mississippi Charity Hosp.	150	95
Lumberton, 2,192—Lamar		
Lumberton Hospital, Inc.	68	57
McComb, 6,237—Pike		
McComb City Hospital	30	12
McComb Infirmary	36	10
Meridian, 24,312—Lauderdale		
Dr. Hairston's Hospital	35	28
King's Daughters' Tuberculosis Hospital	44	35
Meridian Sanitarium	50	15
Rush's Infirmary	60	16
Turner Hospital	50	30
Natchez, 13,070—Adams		
Natchez Hospital *	130	90
Natchez Sanatorium, Inc.	40	20
New Albany, 2,531—Union		
Maye's Hospital	30	14
Newton, 1,604—Newton		
Newton Sanitarium	20	10
Oxford, 2,150—Lafayette		
Bramlett Hospital	20	8
Oxford Hospital	25	10

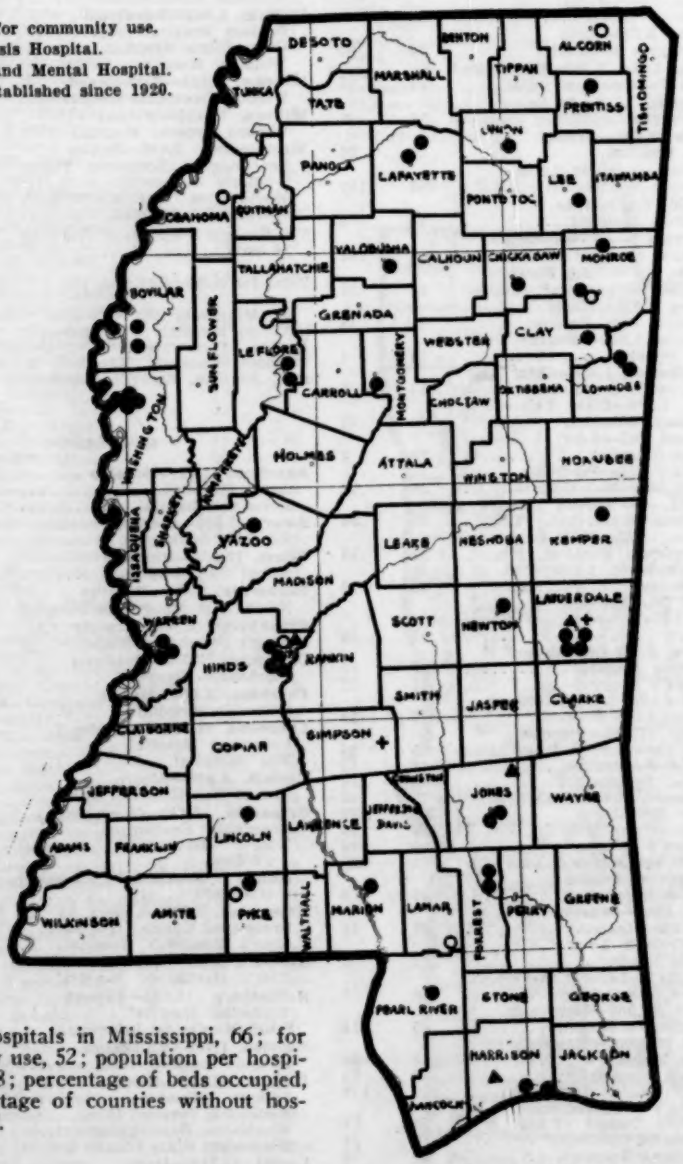
	Total Beds	Av. Beds in Use
Poplarville, 1,290—Pearl River		
Pearl River County Hospital	20	10
Rosedale, 1,696—Bolivar		
King's Daughters' Hospital	10	5
Rosedale Hospital	10	5
Tupelo, 5,055—Lee		
Tupelo Hospital	35	12
Vicksburg, 18,072—Warren		
Mississippi State Charity Hosp.★	110	110
Vicksburg Infirmary	50	40
Vicksburg Sanitarium	75	40
Water Valley, 4,064—Yalobusha		
Water Valley Hospital	12	5

MISSOURI

	Total Beds	Av. Beds in Use
Bonne Terre, 3,815—St. Francois		
Bonne Terre Hospital	30	15
Booneville, 4,665—Cooper		
St. Joseph's Hospital	25	10
Brookfield, 6,304—Linn		
Brookfield Hospital	12	6
Cape Girardeau, 14,258—Cape Girardeau		
Alice K. Schultz Surgical Hosp.	15	9
St. Francis Hospital	75	40
Carrollton, 3,218—Carroll		
South Side Hospital	22	22

MISSISSIPPI

● Hospital for community use.
✚ Tuberculosis Hospital.
▲ Nervous and Mental Hospital.
○ ✚ △ Established since 1920.



Total hospitals in Mississippi, 66; for community use, 52; population per hospital bed, 778; percentage of beds occupied, 56; percentage of counties without hospitals, 62.2.

	Total Beds	Av. Beds in Use
West Point, 4,400—Clay		
Ivy Hospital	24	12
Winona, 2,220—Montgomery		
Winona Infirmary	40	15
Yazoo City, 5,244—Yazoo		
Yazoo Hospital	30	15
One General Hospital of less than 10 beds	8	4
Total for community use, 52	2,301	1,292

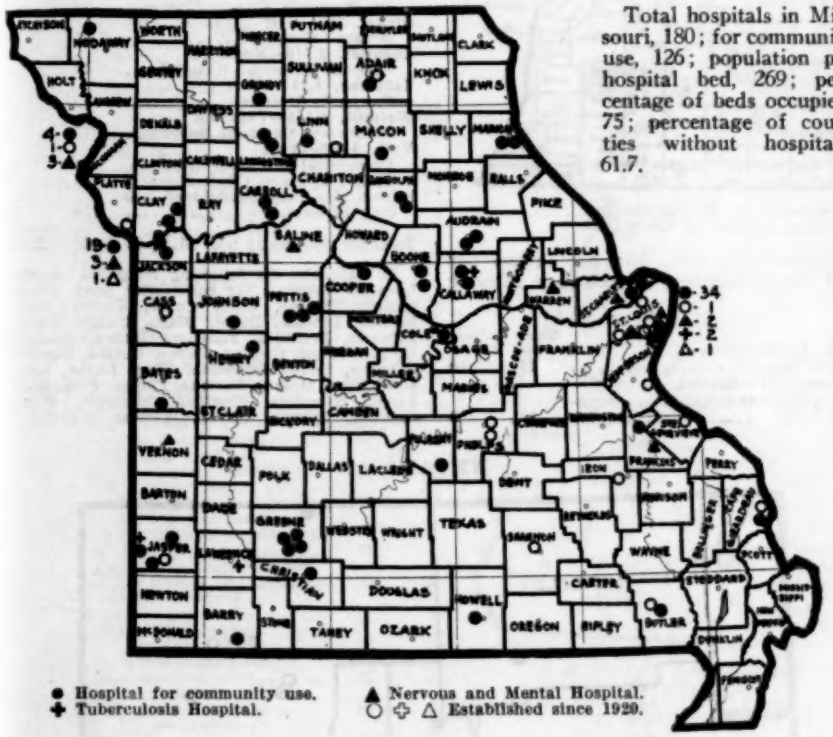
In Mississippi the following fifty-one counties have no hospitals for community use: Amite, Attala, Benton, Calhoun, Carroll, Choctaw, Claiborne, Clarke, Copiah, Covington, DeSoto, Franklin, George, Greene, Grenada, Hancock, Holmes, Humphreys, Issaquena, Itawamba, Jackson, Jasper, Jefferson, Jefferson Davis, Lawrence, Leake, Madison, Marshall, Neshoba, Noxubee, Oktibbeha, Panola, Perry, Pontotoc, Quitman, Rankin, Scott, Sharkey, Smith, Stone, Sunflower, Tallahatchie, Tate, Tippah, Tishomingo, Tunica, Walthall, Wayne, Webster, Wilkinson, Winston.

	Total Beds	Av. Beds in Use
Carthage, 10,438—Jasper		
Carthage Hospital	12	10
Chillicothe, 6,525—Livingston		
Chillicothe Hospital	30	6
The New Hospital	12	8
Clinton, 5,098—Henry		
Dr. N. I. Stebbins Hospital	15	8
Columbia, 10,634—Boone		
Boone County Hospital	40	18
University Hospital	75	19
Crescent, —— — St. Louis		
George Warren Brown Convalescent Hospital	16	7
Crystal City, 2,283—Jefferson		
Pittsburgh Plate Glass Co. Hosp.	15	New
Excelsior Springs, 4,165—Clay		
Excelsior Springs Sanitarium	48	30
Fulton, 5,595—Callaway		
Callaway County Hospital	30	10
Georgetown, —— — Pettis		
Pettis County Hospital	35	16
Glendale, (Kirkwood, P.O.), 749—St. Louis		
Oakland Park Hosp. (N.& M.)	20	12

	Total Beds	Av. Beds in Use
Hannibal, 19,851—Marion		
Levering Hospital	50	28
St. Elizabeth's Hospital	35	16
Independence, 12,720—Jackson		
Independence Sanitarium	53	35
Valle Sanitarium (N.& M.)	35	4
Ironton, 832—Iron		
Arcadia Valley Hospital	20	New
Jefferson City, 15,843—Cole		
St. Mary's Hospital	50	25
Joplin, 29,902—Jasper		
Freeman's Hospital	68	25
St. John's Hospital	75	40
Kansas City, 367,481—Jackson		
Baptist Hospital	35	30
Children's Mercy Hospital	135	121
Christian Church Hospital	135	100
O. J. Cunningham Sanatorium	35	30
Grace Hospital	110	50
Kansas City General Hospital ★	330	292
Kansas City Industrial Hospital	12	6
Northeast Hospital	80	35
Punton Sanitarium (N.& M.)	45	40
Research Hospital ★	175	119
Simpson-Major Sanitarium (N.& M.)	35	21
St. Joseph's Hospital ★	225	125
St. Luke's Hospital ★	140	99
St. Mary's Hospital ★	175	148
St. Vincent's Hospital	40	30
Trinity Lutheran Hospital	58	37
Vineyard Park Hospital	30	29
Wheatley-Provident Hospital	40	20
Willows Maternity Sanitarium	75	60
G. Wilse Robinson Sanitarium (N.& M.)	50	43
Kirksville, 7,213—Adair		
Ellis Hospital	10	7
Grim-Smith Hospital and Clinic	36	26
Kirkwood, 4,422—St. Louis		
Bethesda Dilworth Mem. Hosp.	31	New
Leeds, 1,000—Jackson		
Kansas City Tuberculosis Sanatorium	95	85
Marceline, 3,740—Linn		
B. B. Putnam Memorial Hosp.	15	10
Marthasville, 300—Warren		
Emmaus Home for Epileptics and Feebleminded (N.& M.)	90	84
Maryville, 4,711—Nodaway		
St. Francis Hospital	75	27
Mexico, 6,013—Audrain		
Amanda Coll Hospital	25	10
Audrain Hospital	38	22
Moberly, 13,875—Randolph		
Woodland Hospital	35	25
Monett, 4,206—Barry		
Dr. Wm. M. West's Hospital	18	10
Overland, 800—St. Louis		
Overland Hospital	10	4
Poplar Bluff, 8,042—Butler		
Brandon Hospital	16	12
Cadwell Hospital	12	4
Richmond Heights, 2,136—St. Louis		
St. Mary's Hospital	300	150
Rolla, 2,077—Phelps		
Rolla Hospital	40	15
Sedalia, 22,745—Pettis		
Sedalia General Hospital	14	10
St. Mary's Hospital	20	8
Springfield, 42,140—Greene		
Burge Hospital	28	22
Frisco Employees' Hospital	15	10
Springfield Baptist Hospital	75	48
St. John's Hospital	100	82
St. Charles, 8,503—St. Charles		
St. Joseph's Hospital	45	25
Ste. Genevieve, 2,046—Ste. Genevieve		
Ste. Genevieve Hospital	15	10
St. Joseph, 78,342—Buchanan		
Dr. Byrd's Sanitarium	30	15
Missouri Methodist Hospital	200	92
Noyes Hospital	80	58
St. Joseph Contagious Hospital	14	2
St. Joseph's Hospital	185	75
Thompson Sanitarium (N.& M.)	20	16
Dr. C. R. Woodson's Sanitarium (N.& M.)	35	28
St. Louis, 821,543—St. Louis		
Alexian Bros. Hospital ★	250	180
Barnard Free Skin and Cancer Hospital	44	31
Barnes Hospital ★ †	270	206
Bethesda Hospital	103	65
Christian Hospital	140	60
City Infirmary	60	25
City Isolation Hospital	200	85
City Sanitarium (N.& M.)	2,953	2,900
Evangelical Deaconess Hospital	110	96
Jewish Hospital of St. Louis ★	110	82
Josephine Hospital	50	36
Lutheran Hospital	100	75
Missouri Baptist Sanitarium ★	325	275
Mt. St. Rose Sanatorium (T.B.)	150	150
The Peoples Hospital	50	20
Robert Koch Hospital (T.B.)	475	310
Shriners Hospital for Crippled Children	107	100
St. Ann's Maternity Hospital	50	30
St. Anthony's Hospital	100	85
St. John's Hospital ★	250	136
St. Louis Baptist Hospital	70	55
St. Louis Children's Hospital †	143	84
St. Louis City Hospital ★	700	686
St. Louis City Hospital No. 2 (Colored) ★	250	200

	Total Beds	Av. Beds in Use
St. Louis Maternity Hospital	30	28
St. Louis Mullanphy Hospital	125	80
St. Luke's Hospital *	200	153
St. Mary's Infirmary *	140	120
St. Vincent's Sanit. (N.& M.)	360	300
Westminster Hospital	40	12
Trenton, 6,951—Grundy		
Wright Hospital	15	6
Deer Lodge, 3,780—Powell		
St. Joseph's Hospital	75	18
Dillon, 2,701—Beaverhead		
Barrett Hospital	20	7
Forsyth, 1,838—Rosebud		
Forsyth Deaconess Hospital	33	10
Ft. Benton, 1,004—Chouteau		
St. Clare's Hospital	40	15

MISSOURI



● Hospital for community use.
✚ Tuberculosis Hospital.
▲ Nervous and Mental Hospital.
○ ✚ △ Established since 1920.

Total hospitals in Missouri, 180; for community use, 126; population per hospital bed, 269; percentage of beds occupied, 75; percentage of counties without hospitals, 61.7.

	Total Beds	Av. Beds in Use
Valley Park, 899—St. Louis		
Ridge Farm	60	46
Webb City, 7,887—Jasper		
Jane Chinn Hospital	25	20
Jasper Co. Tuberculosis Hospital	105	88
Webster Groves, 9,474—St. Louis		
Glenwood Sanatorium (N.& M.)	35	30
Miriam Convalescent Home	30	18
Westplains, 3,178—Howell		
Christa Hogan Hospital	16	9
Five General Hospitals of less than 10 beds	29	18
Total for community use, 126	12,865	9,746

In Missouri the following seventy-one counties have no hospitals for community use: Andrew, Atchison, Barton, Benton, Bollinger, Caldwell, Camden, Cedar, Chariton, Clark, Crawford, Dade, Dallas, Daviess, De Kalb, Dent, Douglas, Dunklin, Franklin, Gasconade, Gentry, Harrison, Hickory, Holt, Howard, Knox, Laclede, Lafayette, Lewis, Lincoln, McDonald, Madison, Maries, Mercer, Miller, Mississippi, Moniteau, Monroe, Montgomery, Morgan, New Madrid, Newton, Oregon, Osage, Ozark, Pemiscot, Perry, Pike, Polk, Putnam, Ralls, Ray, Ripley, St. Clair, Saline, Schuyler, Scotland, Scott, Shelby, Stoddard, Stone, Sullivan, Taney, Texas, Vernon, Warren, Washington, Wayne, Webster, Worth, Wright.

MONTANA

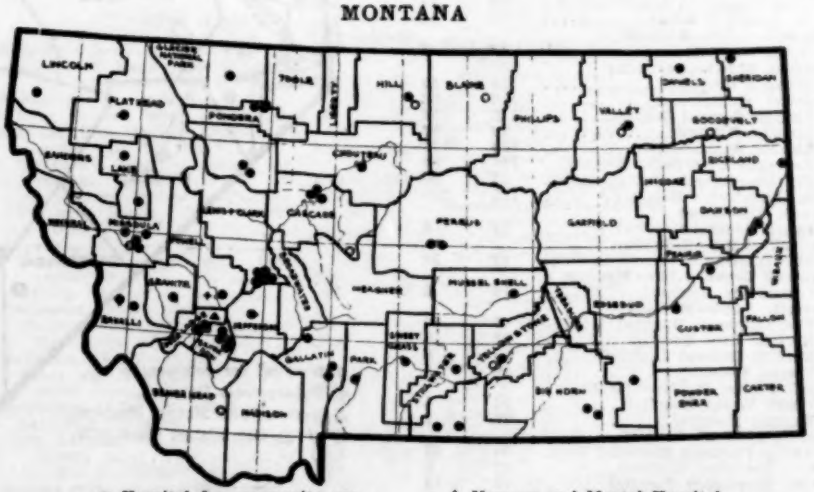
	Total Beds	Av. Beds in Use
Anaconda, 12,537—Deerlodge		
St. Ann's Hospital	65	40
Billings, 17,971—Yellowstone		
St. Vincent's Hospital	160	75
Bozeman, 6,183—Gallatin		
Bozeman Deaconess Hospital	50	22
Butte, 42,867—Silver Bow		
Butte Deaconess Hospital	27	15
Murray Hospital *	110	64
Silver Bow County Hospital	150	125
St. James Hospital *	150	68
Choteau, 1,043—Teton		
Choteau Hospital	10	8
McGregor Hospital	15	8
Columbus, 987—Stillwater		
Stillwater Hospital	14	8
Conrad, 988—Pondera		
Conrad Hospital	20	12
Glasgow, 2,059—Valley		
Frances Mahon Deaconess Hosp.	30	12
Valley County Hospital	20	6
Glendive, 3,816—Dawson		
Glendive General Hospital	20	6
Northern Pacific Hospital	50	21
Havre, 5,429—Hill		
Sacred Heart Hospital	52	35
Helena, 12,037—Lewis and Clark		
Lewis and Clark Hospital	40	30
St. John's Hospital	50	10
St. Peter's Hospital	50	30
Kalispell, 5,147—Flathead		
Kalispell General Hospital	60	40
Lewistown, 6,120—Fergus		
Fergus County Hospital	70	30
St. Joseph's Hospital	50	21
Libby, 1,522—Lincoln		
Kootenai Valley Hospital, Inc.	12	6
Livingston, 6,326—Park		
Park Hospital	30	15
Miles City, 7,937—Custer		
Holy Rosary Hospital	120	40
Missoula, 12,668—Missoula		
Northern Pacific Hospital	75	39
St. Luke's Hospital	20	7
St. Patrick's Hospital	120	65
Thornton Hospital	28	20
Outlook, 295—Sheridan		
Outlook Community Hospital	14	8
Polson, 300—Flathead		
St. Joseph's Hospital	10	6
Red Lodge, 4,515—Carbon		
Mt. Maurice Hospital & Sanitarium	30	18
Roundup, 2,409—Musselshell		
Musselshell Valley Hospital	20	10
Scobey, 1,170—Daniels		
Harris Hospital	10	5
Sidney, 1,400—Richland		
Sidney Deaconess Hospital	32	18
St. Ignatius, 80—Lake		
Holy Family Hospital	30	15
Three Forks, 1,071—Gallatin		
Three Forks Hospital	30	6
Six General Hospitals of less than 10 beds	40	18
Total for community use, 51	2,319	1,213

In Montana the following fifteen counties have no hospitals for community use: Broadwater, Carter, Fallon, Garfield, Liberty, McCone, Madison, Meagher, Mineral, Phillips, Powder River, Sanders, Toole, Treasure, Wibaux.

NEBRASKA

	Total Beds	Av. Beds in Use
Ainsworth, 1,508—Brown		
Brown Co. (Ainsworth) Hospital	24	13
Alliance, 4,591—Box Butte		
St. Joseph's Hospital	65	31
Alma, 1,058—Harlan		
Alma Hospital	12	3
Auburn, 2,863—Nemaha		
Auburn Hospital	10	3
Aurora, 2,962—Hamilton		
Aurora Hospital	20	12
Axtell, 394—Kearney		
Bethphage Inner Mission Ass'n.	110	100

MONTANA

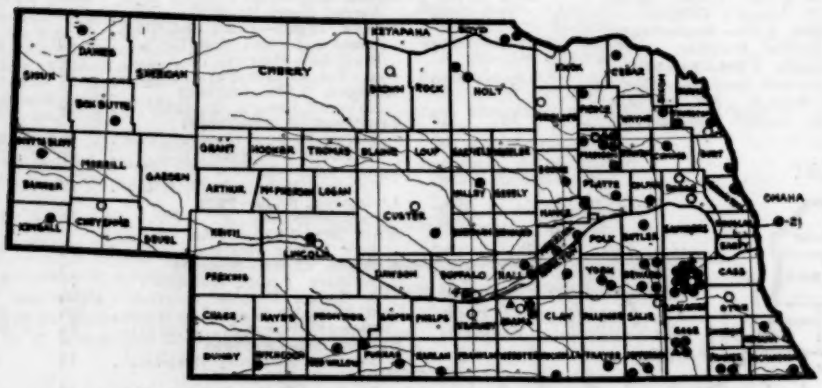


● Hospital for community use.
✚ Tuberculosis Hospital.
▲ Nervous and Mental Hospital.
○ ✚ △ Established since 1920.

Total hospitals in Montana, 70; for community use, 51; population per hospital bed, 274; percentage of beds occupied, 52; percentage of counties without hospitals, 26.8.

	Total Beds	Av. Beds in Use
Great Falls, 29,883—Cascade		
Columbus Hospital	125	91
Montana Deaconess Hospital	115	79
Hamilton, 1,700—Ravalli		
Hamilton Hospital	13	6
Hardin, 1,312—Big Horn		
Labbitt Hospital	14	5
Beatrice, 9,664—Gage		
Beatrice Sanitarium	25	14
Lutheran Hospital	65	30
Mennonite Deaconess Hospital	30	15
Beaver City, 1,103—Furnas		
Beaver City Hospital	10	4
Blair, 2,762—Washington		
Blair Hospital	15	4

NEBRASKA



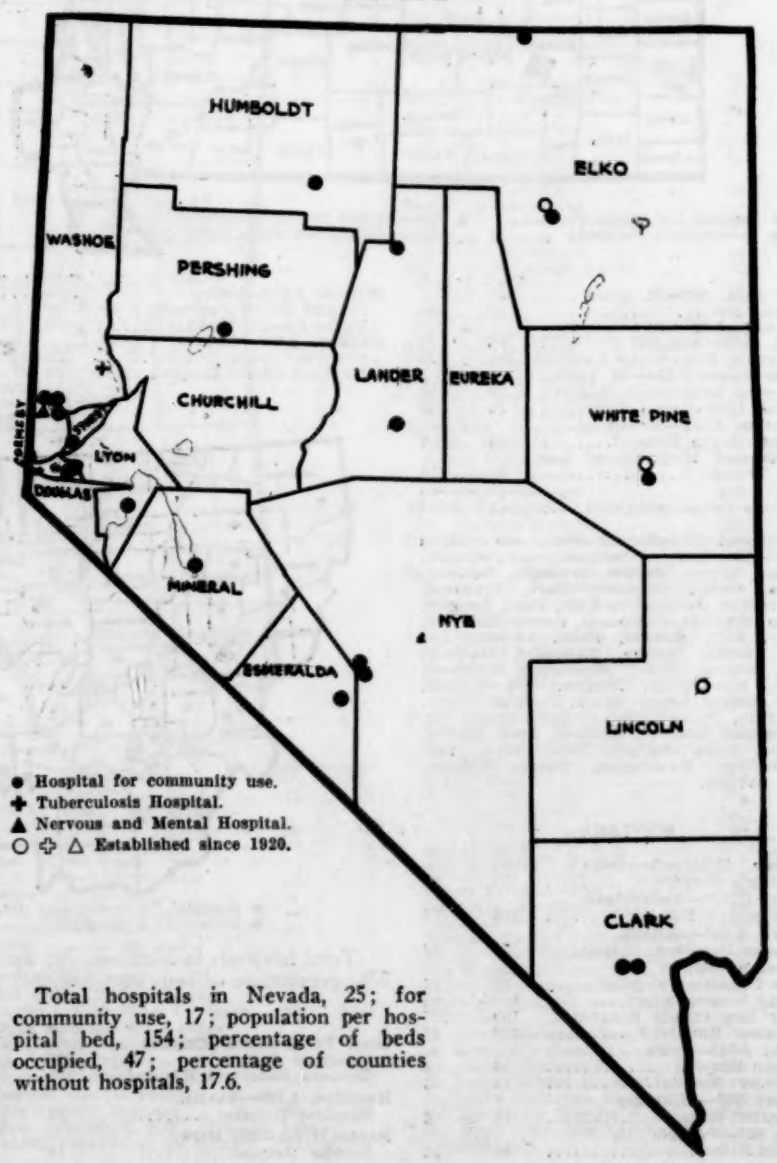
● Hospital for community use.
✚ Tuberculosis Hospital.
▲ Nervous and Mental Hospital.
○ ✣ △ Established since 1920.

Total hospitals in Nebraska, 122; for community use, 96; population per hospital bed, 304; percentage of beds occupied, 59; percentage of counties without hospitals, 48.3.

	Total Beds	Av. Beds in Use
Broken Bow, 2,567—Custer		
Broken Bow Hospital	35	14
Cambridge, 1,042—Furnas		
Republican Valley Hospital	25	10
Central City, 2,410—Merrick		
The J. E. Benton Hospital	10	4
College View, 2,249—Lancaster		
College View Sanitarium	30	18
Columbus, 5,410—Platte		
St. Mary's Hospital	208	150
Crawford, 1,646—Dawes		
R. L. Ivins Hospital	10	4
Dalton, 295—Cheyenne		
The Pioneer Memorial Hospital	10	New
David City, 2,216—Butler		
David City Hospital	25	16
Fairbury, 5,454—Jefferson		
Fairbury Hosiptal	25	6
Taylor Hospital	20	8
Falls City, 4,930—Richardson		
Falls City Hospital	30	10
Fremont, 9,570—Dodge		
Military Avenue Hospital	25	13
Richmond Hospital	12	7
Grand Island, 15,602—Hall		
Grand Island General Hospital	25	17
St. Francis Hospital	200	130
Hastings, 12,954—Adams		
Mary Lanning Memorial Hosp.	60	40
Nebraska Sanitarium	30	10
Hebron, 1,513—Thayer		
Blue Valley Hospital	25	20
Kearney, 7,702—Buffalo		
Good Samaritan Hospital, Inc.	50	15
St. Luke's Hospital	22	11
Kimball, 1,620—Kimball		
Miller Hospital	12	7
Lincoln, 60,941—Lancaster		
Esther's Hospital	25	10
Green Gables	115	92
Lincoln General Hospital	110	54
Lincoln Hospital	30	17
Lincoln Sanitarium	100	70
Nebraska Orthopedic Hospital	100	99
Dr. Shoemaker's Private Hosp.	38	30
St. Elizabeth's Hospital ★	175	110
Lynch, 589—Boyd		
Lynch General Hospital	18	9
McCook, 4,303—Redwillow		
St. Catherine of Sienna Hospital	43	10
Newman Grove, 1,200—Madison		
Community Hospital	10	3
Norfolk, 8,634—Madison		
The Lutheran Hospital	45	29
Norfolk City Hospital	22	16
Norfolk General Hospital	25	8
Verges Hospital	10	5
North Platte, 13,679—Lincoln		
Platte Valley Hospital	14	6
Wurtele Hospital	12	7
Omaha, 211,768—Douglas		
Bishop Clarkson Memorial Hosp.	80	52
City Detention Hospital	22	8
City Emergency Hospital	40	13
Creighton Memorial — St. Joseph's Hospital ★	400	300
Douglas County Hospital	180	130
Evangelical Covenant Hospital	70	40
Immanuel Deaconess Institute	55	41
Lord Lister Hospital	130	81
Nebraska Methodist Episcopal Hospital ★	295	155
Nicholas Senn Hospital	80	55
Omaha Maternity Hospital	22	14
Paxton Memorial Hospital	65	31
Radium Hospital	30	12
South Side Hospital	25	10
St. Catherine's Hospital	165	75
University of Nebraska Hosp.★	130	100
Wise Memorial Hospital	76	50
Ord, 2,143—Valley		
Ord Hospital	15	10
Palmer, 577—Merrick		
Coolidge Hospital and Sanatorium	10	2
Pawnee City, 1,595—Pawnee		
Pawnee City Hospital	22	18
Schuyler, 2,636—Colfax		
Kolouch Hospital	12	8
Scottsbluff, 6,912—Scotts Bluff		
West Nebraska Methodist Episcopal Hospital	52	30
Seward, 2,368—Seward		
Hillcrest Hospital & Sanitarium	11	✱
Morrow Hospital	25	7
Spencer, 728—Boyd		
Spencer Hospital	15	5
Stratton, 509—Hitchcock		
Dr. Stewart's Private Hospital.	14	6
Stuart, 739—Holt		
Wilson Hospital	10	6
Superior, 2,719—Nuckolls		
Superior Memorial Hospital	10	5
Tekamah, 1,811—Burt		
Fraternity Hospital	15	5
Walthill, 1,145—Thurston		
Dr. Picotte Memorial Hospital	15	7
York, 5,388—York		
Evangelical Lutheran Hospital.	60	25
York Clinic and Clinic Hospital	15	3
Fifteen General Hospitals of less than 10 beds	116	43
Total for community use, 96	4,449	2,666

In Nebraska the following forty-five counties have no hospitals for community use: Arthur, Banner, Blaine, Cass, Chase, Cherry, Clay, Dakota, Dawson, Deuel, Dixon, Dodge, Dundy, Fillmore, Franklin, Frontier, Garden, Garfield, Gosper, Grant, Greeley, Hayes, Hooker, Howard, Johnson, Keith, Keyapaha, Knox, Logan, Loup, McPherson, Morrill, Perkins, Phelps, Polk, Rock, Sarpy, Saunders, Sheridan, Sherman, Sioux, Stanton, Thomas, Wayne, Webster, Wheeler.

NEVADA



● Hospital for community use.
✚ Tuberculosis Hospital.
▲ Nervous and Mental Hospital.
○ ✣ △ Established since 1920.

Total hospitals in Nevada, 25; for community use, 17; population per hospital bed, 154; percentage of beds occupied, 47; percentage of counties without hospitals, 17.6.

NEVADA	Total Beds	Av. Beds in Use
East Ely, 475—White Pine		
Steptoe Valley Hospital	40	21
Elko, 2,173—Elko		
Elko General Hospital	50	15
Ely, 2,098—White Pine		
White Pine Co. & General Hosp.	24	18
Goldfield, 1,558—Esmeralda		
Association Hospital	20	5
Hawthorne, 200—Mineral		
Mineral County Hospital	14	9
Las Vegas, 2,304—Clark		
Hewetson Hospital	20	15
Las Vegas Hospital	25	6
Lovelock, 1,164—Pershing		
Lovelock Hospital	18	10
Mason, —— —Lyon		
Mason Hospital	15	3
Reno, 12,665—Washoe		
Reno Hospital	17	10
St. Mary's Hospital	50	28
Washoe County Hospital	96	50
Tonopah, 4,144—Nye		
Nye County Hospital	35	18
Tonopah Mines Hospital	20	12
Winnemucca, 1,275—Humboldt		
Humboldt Co. Hospital	30	7
Two General Hospitals of less than 10 beds	13	5
Total for community use, 17	487	232

In Nevada the following three counties have no hospitals for community use: Churchill, Douglas, Eureka.

NEW HAMPSHIRE	Total Beds	Av. Beds in Use
Berlin, 18,552—Coos		
St. Louis Hospital	60	40
Brentwood (Exeter, P. O.), 759—Rockingham		
Rockingham County Hospital	35	30
Claremont, 7,529—Sullivan		
Claremont General Hospital	52	21
Colebrook, 1,905—Coos		
Colebrook Hospital	30	7
Concord, 22,546—Merrimack		
Margaret Pillsbury General Hospital	50	42
New Hampshire Memorial Hospital for Women and Children	63	40
Dover, 13,029—Strafford		
Wentworth Hospital	62	20
Exeter, 4,604—Rockingham		
Exeter Hospital	52	26
Franklin, 6,318—Merrimack		
Franklin Hospital	37	15
Grasmere, 400—Hillsborough		
Hillsborough Co. Hospital	85	84
Hanover, 1,513—Grafton		
Mary Hitchcock Memorial Hosp.	70	54
Keene, 11,855—Cheshire		
Elliot Community Hospital	70	42
Laconia, 11,300—Belknap		
Laconia Hospital	48	31
Lancaster, 3,054—Coos		
The Lancaster Hospital	15	9
Lincoln, 1,278—Grafton		
Lincoln Hospital	20	5
Littleton, 2,308—Grafton		
Littleton Hospital	25	17
Manchester, 83,097—Hillsborough		
Balch Hospital	19	19
Beacon Hill Hospital	14	12
Elliot Hospital	75	47
Hospital Notre Dame de Lourdes	75	60
Our Lady of Perpetual Help Hospital	25	15
Sacred Heart Hospital	85	54
Nashua, 29,723—Hillsborough		
Nashua Hospital Association	54	46
St. Joseph's Hospital	115	85
New London, 805—Merrimack		
New London Hospital	14	4
Newport, 3,765—Sullivan		
Carrie F. Wright Memorial Hospital	20	12
North Conway, 1,500—Carroll		
Memorial Hospital	30	10
North Haverhill, 60—Grafton		
Grafton Co. Farm Hospital	10	4
Pembroke, —— —Merrimack		
Pembroke Sanat., Inc. (T.B.)	90	65
Peterboro, 2,277—Hillsborough		
The Peterboro Hospital	19	9
Plymouth, 2,353—Grafton		
Emily Balch & Soldiers and Sailors Memorial Hospital	25	12
Portsmouth, 14,871—Rockingham		
Portsmouth Hospital	67	28
Sidis Psychotherapeutic Institute	20	3
Rochester, 9,673—Strafford		
Rochester Hospital	25	20
Whitefield, 1,635—Coos		
Morrison Hospital	35	22
Wolfeboro, 2,224—Carroll		
Huggins Hospital	25	12
Woodsville, 1,750—Grafton		
Grafton County Hospital	20	12
Woodsville Hospital	25	18
Two General Hospitals of less than 10 beds	17	7
Total for community use, 40	1,678	1,059

All Counties in New Hampshire have hospitals.

NEW HAMPSHIRE

● Hospital for community use.
✚ Tuberculosis Hospital.
▲ Nervous and Mental Hospital.
○ ✣ △ Established since 1920.

Total hospitals in New Hampshire, 51; for community use, 40; population per hospital bed, 268; percentage of beds occupied, 63; percentage of counties without hospitals, 0.0.

NEW JERSEY	Total Beds	Av. Beds in Use
Allenwood, —— —Monmouth		
Allenwood Sanitarium & Monmouth County Hospital (T.B.)	55	55
Arlington, —— —Hudson		
West Hudson Hospital	32	21
Atlantic City, 53,287—Atlantic		
Atlantic City Hospital ★	195	140
Children's Seashore House for Invalid Children	390	380
Dr. Leonard Private Sanitarium	25	14
Seaside House for Invalid Women	132	87
Bayonne, 88,767—Hudson		
Bayonne Hospital and Dispensary ★	100	80
Swiney Sanitarium	28	15
Bellemead, 50—Somerset		
Bellemead Farm Colony and Sanitarium (N.& M.)	100	60
Belleville, 18,927—Essex		
Essex Co. Hospital for Contagious Diseases	350	85
Bridgeton, 14,387—Cumberland		
Bridgeton Hospital	82	35
Cumberland Co. Hospital for Insane	175	175
Ivy Hall Sanitarium (N.& M.)	25	23
Browns Mills, —— — Burlington		
Deborah Tuberculosis Sanat.	40	40
Camden, 128,642—Camden		
Bellevue Private Hospital	25	18
Cooper Hospital ★	201	154
West Jersey Homeopathic Hosp.★	140	90
Cedargrove, 569—Essex		
Essex County Hospital (N.& M.)	2,000	1,936
Chatsworth, 100—Burlington		
The Pines Sanatorium (T.B.)	30	10
Dover, 9,817—Morris		
Dover General Hospital	24	17
Elizabeth, 95,783—Union		
Alexian Brothers' Hospital ★	110	90
Elizabeth General Hospital ★	170	90
St. Elizabeth's Hospital ★	160	125
Englewood, 12,590—Bergen		
Daisy Fields Hospital for Crippled Children	18	18
Englewood Hospital Ass'n.★	115	81
Farmingdale, 416—Monmouth		
Tuberculosis Preventorium for Children	180	150
Franklin, 4,075—Sussex		
Franklin Hospital	25	15
Gremloch, —— — Camden		
Camden Co. Hospital for the Insane	350	241
Sunny Rest Sanatorium (T.B.)	228	210
Hackensack, 19,715—Bergen		
Hackensack Hospital ★	225	135
Hoboken, 68,166—Hudson		
Farr Sanatorium	20	10
St. Mary's Hospital ★	450	109
Irvington, 33,186—Essex		
Irvington General Hospital	75	60
Jersey City, 315,280—Hudson		
Bergen Private Sanitarium	30	20
Christ Hospital ★	110	75
Fairmount Private Hospital	48	40
Greenville Hospital	60	28
Jersey City Hospital ★	570	447
St. Francis' Hospital ★	220	150
Lakewood, 3,000—Ocean		
Paul Kimball Hospital, Inc.	50	30
Long Branch, 13,646—Monmouth		
Dr. E. C. Hazard Hospital	57	26
Monmouth Memorial Hospital ★	176	110
Midland Park, 2,243—Bergen		
Christian Sanatorium (N.& M.)	50	46
Millville, 15,960—Cumberland		
Millville Hospital	30	18
Montclair, 32,922—Essex		
Mountainside Hospital ★	216	108
Morristown, 12,570—Morris		
All Souls Hospital	90	58
Aurora Health Farm	20	12
Morristown Memorial Hospital ★	150	79
Physiatric Institute	100	60
Shonghum Sanatorium (T.B.)	44	32
Mt. Holly, 5,750—Burlington		
Burlington County Hospital	35	25
Newark, 452,513—Essex		
The Babies Hospital	40	26
Homeopathic Hospital of Essex County	50	36
Hospital and Home for Crippled Children	64	58
Hospital for Women and Children	60	30
Hospital of St. Barnabas ★	119	82
Lincoln Private Hospital	30	15
Newark Beth Israel Hospital ★	102	95
Newark City Hospital ★	650	560
Newark Eye and Ear Infirmary	56	10
Newark Maternity Hospital	30	22
Newark Memorial Hospital ★	150	110
Newark Private Hospital	50	40
Presbyterian Hospital	80	61
St. Gerard's Newark Italian Hospital	100	30
St. James Hospital ★	115	75
St. Michael's Hospital ★	300	250
Dr. Waite's Surgical Sanatorium	15	6
Dr. Wright's Sanitarium	20	10
New Brunswick, 37,984—Middlesex		
Francis E. Parker Home	28	20
Middlesex General Hospital	60	46
St. Peter's General Hospital	91	80
Newfoundland, 564—Morris		
Newfoundland Health Ass'n	30	20
New Lisbon, 50—Burlington		
Burlington County Hospital for the Insane	200	193
Fairview Sanatorium (T.B.)	55	45
Northfield, 1,127—Atlantic		
Atlantic Co. Hospital for Tuberculous Diseases	50	28
Atlantic Co. Hospital for Mental Diseases	300	250
Orange, 35,379—Essex		
New Jersey Orthopedic Hospital and Dispensary	35	33
Orange Memorial Hospital ★	180	163
St. Mary's Hospital ★	130	80
Passaic, 68,979—Passaic		
Passaic General Hospital ★	112	80
St. Mary's Hospital ★	115	76
Paterson, 141,695—Passaic		
Barnert Memorial Hospital ★	100	75
Paterson City Hospital	110	58
Paterson General Hospital ★	167	110
Riverlawn Sanatorium (N.& M.)	50	25
St. Joseph's Hospital ★	290	150
Perth Amboy, 47,136—Middlesex		
Perth Amboy City Hospital	100	41
Phillipsburg, 18,633—Warren		
Warren Hospital	60	12
Plainfield, 31,748—Union		
Muhlenberg Hospital ★	125	105
Plainfield Sanitarium	55	15
Pompton Lakes, 2,008—Passaic		
St. Paul's Deaconess Home and Hospital	40	5
Princeton, 5,917—Mercer		
Princeton Hospital	35	18
Ridgewood, 7,580—Bergen		
Bergen Pines Bergen County Hospital (T.B.)	250	100

	Total Beds	Av. Beds in Use
Riverside, 4,000—Burlington		
Zurbrugg Memorial Hospital	12	6
Riverton, 2,341—Burlington		
Cinnaminson Home	25	14
Salem, 7,435—Salem		
Salem Co. Memorial Hospital	32	20
Scotch Plains, 1,000—Union		
Bonnie Burn Sanatorium (T.B.)	280	252
Secaucus, 5,423—Hudson		
Hudson County Hospital	144	140
Hudson County Hospital for Insane	1,400	1,000
Hudson County Smallpox Hosp.	50	34
Hudson Co. Tuberculosis Hosp.	189	173
Trenton, 132,020—Mercer		
Mercer Hospital ★	155	92
Orthopaedic Hospital and Dispensary	21	20
St. Francis' Hospital ✱	211	205
Wm. McKinley Memorial Hosp.★	136	80
Union, 63,117—Union		
Hamilton Sanitarium	30	15
Ventnor, 491—Atlantic		
North American Sanitarium for Surgical Tuberculosis	40	37
Verona, 3,039—Essex		
Essex Mountain Sanat. (T.B.)	250	215
Montclair Fresh Air and Convalescent Home	40	36

NEW JERSEY

Total hospitals in New Jersey, 180; for community use, 103; population per hospital bed, 207; percentage of beds occupied, 72; percentage of counties without hospitals, 4.8.

	Total Beds	Av. Beds in Use
Somerville, 6,718—Somerset		
Somerset Hospital	74	35
South Amboy, 7,897—Middlesex		
South Amboy Memorial Hospital	35	15
South Orange, 7,274—Essex		
Dr. Runyon's Hospital	15	5
Spring Lake Beach, 853—Monmouth		
Ann May Memorial Homeopathic Hospital	69	53
Summit, 11,687—Union		
Fair Oaks Sanatorium (N.& M.)	41	38
Overlook Hospital	80	50
Sussex, 1,318—Sussex		
Alexander Linn Hospital	20	10
Teaneck, —— — Bergen		
"Bright Side" Sanitarium	25	22
Holy Name Hospital	155	New
Vineland, 6,799—Cumberland		
Newcomb Hospital	65	40
Weehawken, 11,228—Hudson		
North Hudson Hospital ★	92 (a)	68
Wildwood, 2,790—Cape May		
Margaret Mace's Hospital	10	6
Woodbury, 5,801—Gloucester		
Brewer Hospital	18	12
Underwood Hospital	24	16
One General Hospital of less than 10 beds	6	1
Total for community use, 103	16,874	12,189

In New Jersey the following county has no hospital for community use: Hunterdon.

NEW MEXICO

	Total Beds	Av. Beds in Use
Albuquerque, 21,000—Bernalillo		
Albuquerque Sanatorium (T.B.)	55	23
Atchison, Topeka & Sante Fe Hospital	42	18
Children's Hospital	30	15
E. S. Marshall Sanatorium (T.B.)	14	10
Methodist Deaconess Sanatorium (T.B.)	65	60
Southwestern Presbyterian Sanatorium (T.B.)	100	82
St. Joseph's Sanatorium & Hosp.	36	13
Women's and Children's Hosp.	36	12
Carlsbad, 2,205—Eddy		
Eddy County Hospital	17	8
St. Francis Hospital	50	25
Cloudcroft, 200—Otero		
Cloudcroft Baby Sanatorium	15	10
Clovis, 4,904—Curry		
Atchison, Topeka and Santa Fe Hospital	32	16
New Mexico Baptist Hospital	23	8
Dawson, 100—Colfax		
Phelps Dodge Corporation Hosp.	30	16
Deming, 3,212—Luna		
Deming Ladies' Hospital	24	5
Holy Cross Sanatorium (T.B.)	180	40
Farmington, 576—San Juan		
San Juan Hospital, Inc.	12	6
Gallup, 3,920—McKinley		
St. Mary's Hospital	77	36
Gardiner, 1,120—Colfax		
Gardiner Hospital	35	7
Las Vegas, 4,304—San Miguel		
Las Vegas Hosp. and Sanitarium	64	34
St. Anthony's Sanitarium and Hospital	68	26
Lordsburg, 1,325—Hidalgo		
Lordsburg Hospital	16	6
Rehoboth, —— —McKinley		
Rehoboth Mission Hospital	31	26
Roswell, 7,062—Chaves		
St. Mary's Hospital	75	55
Santa Fe, 7,236—Santa Fe		
St. Vincent's Sanatorium and Hospital	85	50
Sunmount Sanatorium (T.B.)	50	44
Silver City, 1,100—Grant		
Grant County Hospital	13	6
New Mexico Cottage Sanatorium (T.B.)	75	50
Tucumcari, 3,117—Quay		
Tucumcari Hospital	20	8
Valmora, —— —Mora		
Valmora Sanatorium (T.B.)	80	50
Two General Hospitals of less than 10 beds	13	3
Total for community use, 32	1,463	768

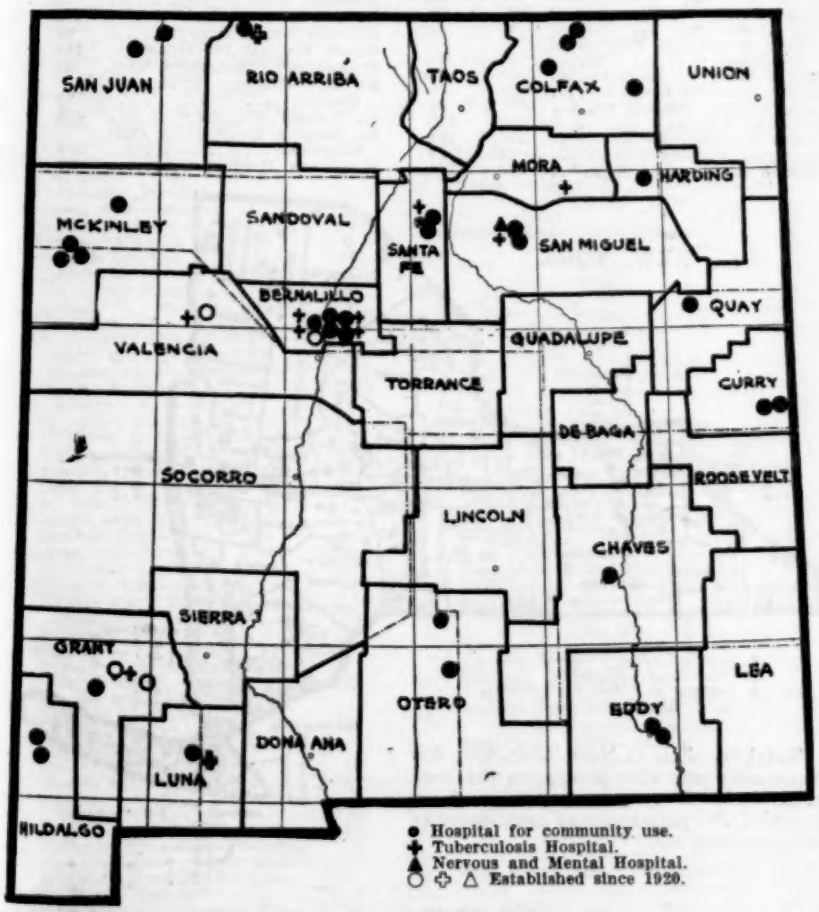
In New Mexico the following fourteen counties have no hospitals for community use: De Baca, Dona Ana, Guadalupe, Hidalgo, Lea, Lincoln, Mora, Roosevelt, Sandoval, Sierra, Socorro, Taos, Torrance, Union.

NEW YORK

	Total Beds	Av. Beds in Use
Albany, 117,820—Albany		
Albany Hospital ★	411	310
Albany's Hospital for Incurables	100	90
Anthony N. Brady Maternity Hospital	50	40
Child's Hospital	60	40
Evergreens Sanatorium School (N.& M.)	15	8
Memorial Hospital	126	98
St. Peter's Hospital ★	135	87
Albion, 4,683—Orleans		
Arnold Gregory Memorial Hosp.	24	12
Orleans County Hospital	80	15
Amityville, 3,265—Suffolk		
Knickerbocker Hall (N.& M.)	31	31
Long Island Home (N.& M.)	164	150
Louden Hall, Cottage Home Sanitarium	75	60
Amsterdam, 35,260—Montgomery		
Amsterdam City Hospital	65	40
Montgomery County Sanatorium (T.B.)	44	43
St. Mary's Hospital	52	48
Auburn, 35,677—Cayuga		
Auburn City Hospital ★	87 (a)	65
Mercy Hospital of Auburn	25	17
The Pines (N.&M.)	15	7
Sunny Crest Sanatorium (T.B.)	38	25
Ballston Spa, 4,103—Saratoga		
Spa Sanatorium	25	15
Batavia, 15,628—Genesee		
St. Jerome's Hospital	52	37
Woman's Hospital Association	50	25
Bath, 4,795—Steuben		
Bath Hospital	50	30
Pleasant Valley Sanatorium (T.B.)	32	28
Bay Shore, 4,000—Suffolk		
Dr. King's Private Hospital	30	13
Southside Hospital, Inc.	40	27

	Total Beds	Av. Beds in Use
Beacon, 11,621—Dutchess		
Craig House (N.& M.)	50	45
Highland Hospital	27	20
Bedford Hills, 1,000—Westchester		
Montefiore Country Sanatorium (T.B.)	219	200
Binghamton, 71,915—Broome		
Binghamton City Hospital ★	150	126
Binghamton Training School for Nervous, Backward & Mental Defectives	30	18
Endicott-Johnson Clinton Street Hospital	14	10
Dr. Lyon's Sanitarium (N.& M.)	10	8
Moore-Overton Hospital	20	16
Brentwood, 500—Suffolk		
Ross Sanitarium	30	20
Brewster, 859—Putnam		
Mountainbrook Farm	25	24
Bronxville, 3,055—Westchester		
Lawrence Hospital	80	40
Jewish Hospital of Brooklyn ★	296	234
Kings County Hospital ★	1,809	1,430
Kingston Avenue Hospital	410	244
Long Island College Hospital ★	450	318
Lutheran Hospital	43	32
Methodist Episcopal Hospital ★	247	241
Midwood Sanitarium, Inc	34	26
Norwegian Lutheran Deaconesses' Home and Hospital ★	168	120
Prospect Heights Hospital and Brooklyn Maternity	106	78
Ridgewood Sanitarium	15	12
Samaritan Hospital of Brooklyn	50	38
St. Catherine's Hospital ★	252	218
St. John's Hospital ★	100 (a)	61
St. Mary's Hospital ★	268	192
St. Peter's Hospital ★	250	200
Swedish Hospital	64	51
Trinity Hospital	50	35
United Israel-Zion Hospital	160	158

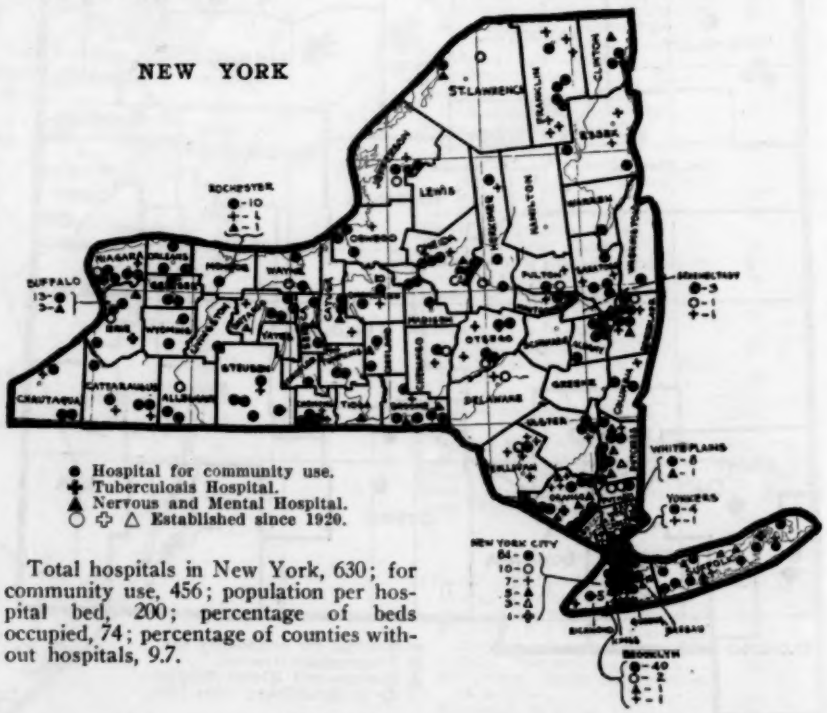
NEW MEXICO



Total hospitals in New Mexico, 53; for community use, 32; population per hospital bed, 259; percentage of beds occupied, 52; percentage of counties without hospitals, 45.1.

	Total Beds	Av. Beds in Use
Brooklyn, 2,018,356—Kings		
Bay Ridge Sanitarium	50	30
Bedford Maternity Hospital	20	12
Bedford Sanitarium	14	9
Bethany Deaconess Hospital	100	62
Beth Moses Hospital ★	182	156
Borough Park Maternity Hosp.	75	50
Brooklyn Eye and Ear Hospital	76	23
Brooklyn Hebrew Maternity Hospital	27	25
Brooklyn Home for Consumptives	101	98
Brooklyn Hospital ★	260	207
Brooklyn Maternity Hospital	29	12
Brownsville & East New York Hospital ★	120	115
Bushwick Hospital	88	68
Caledonian Hospital	25	20
Carson C. Peck Memorial Hosp.	90	72
Coney Island Hospital	132	99
Cumberland Hospital ★	340	223
Greenpoint Hospital ★	239	140
Hamilton Private Hospital	23	16
Harbor Hospital, Inc	60	21
Hospital of the Holy Family ★	110	79
House of St. Giles the Cripple	100	71
Unity Hospital	200	125
Williamsburgh Maternity	50	40
Wyckoff Heights Hospital ★	161	134
Buffalo, 536,016—Erie		
Buffalo City Hospital ★	825	678
Buffalo Columbus Hospital	73	50
Buffalo General Hospital ★	371	250
Buffalo Hospital of the Sisters of Charity ★	215	113
Buffalo Woman's Hospital	30	18
Children's Hospital	124	98
Deaconess Hospital ★	162	150
Emergency Hospital of Sisters of Charity ★	100	81
Erie County Hospital ★	291	277
Lafayette General Hospital	50	36
Memorial Hospital of Buffalo	55	32
Mercy Hospital	28	24
Millard Fillmore Hospital ★	160	147
Parkside Sanitarium (N.& M.)	40	30
Providence Retreat (N.& M.)	200	175
St. Mary's Hospital	89	50
Cambridge, 1,559—Washington		
Mary McClellan Hospital	50	35
Canandaigua, 7,356—Ontario		
Brigham Hall Hospital (N.& M.)	70	50
Canandaigua Health Home	22	19
Frederick Ferris Thompson Hospital	130	85
Canastota, 3,995—Madison		
Canastota Memorial Hospital	13	8
Cassadaga, 428—Chautauqua		
Newton Memorial Hospital (T.B.)	90	84
Castile, 1,013—Wyoming		
Sanitarium at Castile	100	40
Central Valley, 800—Orange		
Dr. MacDonald's House (N.& M.)	30	30
Chappaqua, 733—Westchester		
Elizabeth Milbank Anderson Home for Convalescent Children	175	145
Chenango Bridge, 360—Broome		
Broome County Tuberculosis Hospital	78	60
Churchville, 565—Monroe		
Convalescent Home of Rochester	12	7
Clifton Springs, 1,628—Ontario		
Clifton Springs Sanitarium and Clinic ★	375	250
Cohoes, 23,345—Albany		
Cohoes Hospital	60	35
Cold Spring, 1,422—Putnam		
Julia L. Butterfield Memorial Hospital	24	5
Loretto Rest	14	7
Cooperstown, 2,725—Otsego		
Thanksgiving Hospital	28	New
Corning, 15,722—Steuben		
Corning Hospital	85	40
Cornwall, 2,658—Orange		
Dr. Winter's Neurological Hosp.	14	14
Corona, —— — Queens		
Dr. Combes' Sanitarium (N.& M.)	62	62
Cortland, 13,879—Cortland		
Cortland County Hospital	70	48
Cortland Sanitarium (N.& M.)	12	10
Cuba, 1,611—Allegany		
Cuba Memorial Hospital	16	8
Dansville, 4,681—Livingston		
Dansville General Hospital	22	15
Delhi, 1,669—Delaware		
Delaware Co. Sanatorium (T.B.)	28	4
Dobbs Ferry, 4,401—Westchester		
Dobbs Ferry Hospital	50	25
Dunkirk, 19,912—Chautauqua		
Brook's Memorial Hospital	55	35
East Aurora, 3,703—Erie		
The Hanavan Sun Cure Sanatorium (T.B.)	38	28
Eastview, —— —Westchester		
Solomon and Betty Loeb Memorial Home for Convalescents	107	101
Elmira, 48,359—Chemung		
Arnot-Ogden Memorial Hosp.★	110	75
Chemung Sanatorium (T.B.)	32	28
Federation Farm (T.B.)	22	22
Gleason Health Resort	40	25
St. Joseph's Hospital	152	130
Endicott, 15,627—Broome		
Endicott General Hospital	15	12
Farmingdale, 2,091—Nassau		
Nassau County Sanat. (T.B.)	110	90
Far Rockaway, —— — Queens		
St. Joseph's Hospital	73	47
Flushing, —— — Queens		
Flushing Hospital and Dispensary ★	107	106
Fulton, 12,571—Oswego		
Albert Lindley Lee Memorial Hospital	35	20
Gabriels, 200—Franklin		
Sanatorium Gabriels (T.B.)	110	100
Geneva, 15,908—Ontario		
Geneva General Hospital	57	40
Glen Cove, 8,664—Nassau		
Glen Cove Community Hospital	20	2
Glens Falls, 17,851—Warren		
Glen Falls Hospital	75	60
Gloversville, 22,110—Fulton		
Nathan Littauer Hospital	55	51
Summit View Sanatorium (T.B.)	22	21
Goshen, 2,843—Orange		
Goshen Emergency Hospital	22	11
Interpines Sanitarium (N.& M.)	56	50
Dr. L. J. Kiernan's Health Farm	12	6
Greenport, 3,122—Suffolk		
Eastern Long Island Hospital	22	15
Harmon-on-Hudson, 110—Westchester		
Crichton House (N.& M.)	16	12
Harrison, 1,485—Westchester		
Dr. Brook's House (N.& M.)	10	9
St. Vincent's Retreat (N.& M.)	180	165
Hastings-upon-Hudson, 5,526—Westchester		
Spring Hill Sanitarium (N.& M.)	25	20
Hemstead, 6,382—Nassau		
Mercy Hospital	12	7
Herkimer, 10,910—Herkimer		
Herkimer County Hospital	10	8
Herkimer Memorial Hospital	31	New
Holcomb, —— —Ontario		
Oak Mount Sanatorium (T.B.)	47	42
Holtsville, 142—Suffolk		
Suffolk Sanatorium (T.B.)	92	91
Homer, 2,356—Cortland		
Homer Hospital	12	6

	Total Beds	Av. Beds in Use
Hornell, 15,784—Steuben		
Bethesda Hospital	45	30
St. James' Mercy Hospital	62	29
Steuben Sanitarium	75	45
Hudson, 11,755—Columbia		
Hudson City Hospital	85	50
Huntington, 6,200—Suffolk		
Huntington Hospital Ass'n	35	27
Ilion, 10,426—Herkimer		
Ilion Hospital	25	17
Ithaca, 18,948—Tompkins		
Cayuga Preventorium	30	18
Ithaca City Hospital	105	77
Jamaica (Pop. Incl. in New York City)—Queens		
Mary Immaculate Hosp. Ass'n.	80	82
Queensboro Hospital	40	20
Jamestown, 43,414—Chautauqua		
Jamestown General Hosp. Ass'n.	102	73
Woman's Christian Association Hospital	56	50
Johnson City, 8,587—Broome		
Johnson City General Hospital	141	102
Katonah, 1,400—Westchester		
Hillbourne Farms	15	10
Kingston, 28,099—Ulster		
City of Kingston Hospital	77	48
Our Lady of Victory Sanitarium	90	40
Ulster County Tuberculosis Hospital	22	18
Lackawanna, 20,196—Erie		
Moses Taylor Hospital	29	20
Our Lady of Victory Hospital	90	65
Lake Kushaqua, —— —Franklin		
Stony Wold Sanatorium (T.B.)	111	100
Lake Ronkonkoma, 49—— —Suffolk		
Gary de Vabre Academy (N.& M.)	12	12
Liberty, 2,459—Sullivan		
The Farley Cottage (T.B.)	25	18
O'Donnell Nursing Cottage (T.B.)	20	18
Wilkinson House (T.B.)	25	24
Workmen's Circle Sanat. (T.B.)	100	70
Little Falls, 12,428—Herkimer		
Little Falls Hospital	34	24
Lockport, 21,676—Niagara		
Lockport City Hospital	59	44
Niagara County Sanat. (T.B.)	125	97
Long Island City, (Pop. Incl. in New York City) Queens		
River Crest Sanitarium (N.& M.)	132	112
St. John's Long Island City Hospital ★	197	155
Loomis, 200—— —Sullivan		
Loomis Sanatorium (T.B.)	230	210
Lyons, 4,253—Wayne		
Edw. J. Barber Hospital	16	10
Lyons Hospital	15	8
Malone, 7,556—Franklin		
Alice Hyde Memorial Hospital	35	23
Mamaroneck, 6,571—Weschester		
Waldemere (N.& M.)	21	12
Marcy, 112—— —Oneida		
Camp Healthmore (T.B.)	38	30
Medford Station, —— —Suffolk		
Medford Tuberculosis Sanat.	50	30
Medina, 6,237—Orleans		
Medina Memorial Hospital	25	6
Middle Grove, 217—Saratoga		
Saratoga Co. Tuberculosis Hosp.	53	53
Middletown, 20,412—Orange		
Middletown Sanitarium	50	25
Thrall Hospital	34	21
Mineola, 3,016—Nassau		
Mineola Home (for Cardiacs)	56	50
Nassau Hospital ★	114	77
Mineville, 1,844—Essex		
Mineville Hospital	14	8
Monticello, 2,330—Sullivan		
Monticello Hospital	20	10
Mt. Kisco, 3,901—Westchester		
The Northern Westchester Hosp.	50	24
Mt. Vernon, 50,382—Westchester		
Mt. Vernon Hospital ★	110	72
Mt. Vision, 250—Otsego		
Otsego County Sanat. (T.B.)	26	18
Newburgh, 30,419—Orange		
Estelle and Walter C. Odell Memorial Sanatorium (T.B.)	48	36
St. Luke's Hospital	110	82
New Hartford, 1,621—Oneida		
Children's Hospital and Home of Utica	25	15
New Rochelle, 44,222—Westchester		
New Rochelle Hospital ★	115	72
New York City, 5,873,356—New York		
Babies' Hospital	80	67
Beekman Street Hospital	55	42
Bellevue Hospital ★	1,582	1,480
Bellevue Settlement House (T.B.)	22	20
Beth David Hospital	88	78
Beth Israel Hospital ★	137	109
Boyce Sanitarium	13	8
Broad Street Hospital	110	85
Bronx Eye and Ear Infirmary	30	9
Bronx Hospital and Dispensary	86	69
Bronx Maternity Hospital	28	22
Bronx Sanitarium	20	12
Dr. Brunor's Sanitarium	20	10
Central Park West and Towns Hospital	50	32
Columbus Hospital	100	58
Columbus Hospital Extension	100	50
Community Hospital	83	78
Concourse Sanitarium	50	30
Fifth Avenue Hospital ★	224	165
Floating Hospital	32	25
Fordham Hospital ★	340	284
French Hospital ★	106	100
Gouverneur Hospital ★	215	195
Harlem Eye and Ear Hospital	48	25
Harlem Hospital ★	262	185
Harlem Italian Sanitarium	34	20
Hebrew Convalescent Home	50	45
Hebrew Knapp Memorial Eye Hospital	45	36
Hill Sanatorium	40	20
Hospital and House of Rest for Consumptives	85	83
Hospital for Joint Diseases †	286	165
Hospital of St. Elizabeth of Hungary	50	25
House of Calvary	100	81
House of the Annunciation	30	25
House of the Holy Comforter	90	80
Hunts Point Hospital	84	50
The Infantorium	40	35
Italian Hospital of Borough of Manhattan ★	97 (a)	62
Jewish Maternity Hospital	52	34
Jewish Memorial Hospital	116	79
Knickerbocker Hospital ★	108 (a)	66
Lebanon Hospital ★	162	115
Lenox Hill Hospital ★	314	265
Lexington Hospital	44	25
Lincoln Hospital and Home ★	234	184
New York Infirmary for Women and Children ★	130	78
New York Nursery and Child's Hospital	182	135
New York Ophthalmic Hospital	47	5
New York Orthopedic Disp. and Hospital	132	88
New York Polyclinic Med. School and Hospital ★	300	167
New York Post-Graduate Medical School and Hospital ★ †	410	314
New York Skin & Cancer Hosp.†	100	58
New York Society for the Relief of the Ruptured & Crippled †	236	200
Peoples Hospital	55	45
Plaza Hospital	30	20
Presbyterian Hospital ★	255	231
The Reconstruction Hospital	59	35
Rehabilitation Institute and General Hospital	12	6
Riverside Hospital (T.B.)	628	559
Rockefeller Institute for Medical Research	50	28
Roosevelt Hospital ★	377	257
Roosevelt Hotel-Hospital	15	5
Seton Hospital (T.B.)	470	225
Sherman Square Hospital	35	30
Sloane Hospital for Women	164	70
St. Andrew's Convalescent Hosp.	31	18
St. Bartholomew's Clinic and Hospital	51	36
St. Francis' Hospital ★	450	273
St. Joseph's Hospital for Consumptives	350	268
St. Luke's Hospital ★	417	346
Lloyd Hospital for Mental Patients	21	12
Lutheran Hospital of Manhattan	103	58
Lying-in Hospital	156	133
Madison Sanitarium	18	12
Manhattan Eye, Ear and Throat Hospital †	186	146
Manhattan Maternity & Dispensary †	35	32
Manhattan Square Sanatorium	30	20
Mem. Hosp. for Treatment of Cancer and Allied Diseases	104	24
Metropolitan Hospital ★	1,665	1,037
Midtown Hospital	38	17
Misericordia Hospital	282	180
Montefiore Hospital for Chronic Diseases †	794	744
Mt. Sinai Hospital ★ †	667	530
Neurological Hospital	500	489
Neurological Institute of New York (N.& M.)	84	72
New Lloyd's Sanitarium	65	40
New York City Cancer Institute Hospital	200	130
New York City Children's Hospital (N.& M.)	1,688	1,302
New York City Hospital ★	1,027	748
New York Eye and Ear Infirmary †	175	125
New York Homeopathic Medical College and Flower Hospital ★	189	147
New York Hospital ★	306	235
St. Mark's Hospital ★	160	130
St. Mary's Free Hospital for Children	130	91
St. Rose's Free Home for Incurable Cancer	89	85
St. Vincent's Hospital ★	350	300
The Tonsil Hospital	35	20
Union Hospital of Bronx	59	48
Victoria Apartments (T.B.)	19	18
West Hill (Riverdale Sanitarium (N.& M.)	23	19
Willard Parker and Reception Hospitals	610	209
Woman's Hospital	205	156
Dr. Yasuna's Maternity Hospital	20	7
Niagara Falls, 57,033—Niagara		
Mt. St. Mary's Hospital	144	70
Niagara Falls Memorial Hospital	106	70
Niagara Falls Municipal Hosp.	42	9
North Tonawanda, 17,356—Niagara		
De Graff Memorial Hospital	26	14
Norwich, 8,268—Chenango		
Norwich Memorial Hospital	36	21
Nyack, 4,444—Rockland		
Nyack Hospital	75	28
Ogdensburg, 17,047—St. Lawrence		
A. Barton Hepburn Hospital	158	120
Olean, 21,332—Chattaraugus		
The Mountain Clinic Hospital	35	29
Olean General Hospital	75	41
Rocky Crest Sanatorium (T.B.)	50	47



Total hospitals in New York, 630; for community use, 456; population per hospital bed, 200; percentage of beds occupied, 74; percentage of counties without hospitals, 9.7.

	Total Beds	Av.Beds in Use
Oneida, 10,656—Madison		
Broad Street Hospital	55	40
Oneida City Hospital	14	8
Oneonta, 12,057—Otsego		
Aurelia Osborn Fox Memorial Hospital	47	33
Parshall Private Hospital	30	18
Onondaga, 250—Onondaga		
Onondaga County Hospital	85	80
Orwell, 1,029—Oswego		
Ideal Rest Sanatorium and Hospital (T.B.)	112	35
Ossining, 12,769—Westchester		
Ossining Hospital	44	35
Oswego, 22,369—Oswego		
Oswego Hospital	61	41
Otisville, 250—Orange		
Dr. Cahill's Private Sanitarium (T.B.)	25	20
Municipal Sanat. of of the Dept. of Health (T.B.)	565	512
Owego, 4,147—Tioga		
Glenmary Sanitarium (N.& M.)	20	14
Peekskill, 17,993—Westchester		
Noyes Memorial Home	30	20
Peekskill Hospital	65	30
Pelham Manor, 1,754—Westchester		
Pelham Home for Children	32	29
Penn Yan, 4,517—Yates		
Soldiers and Sailors Memorial Hospital	37	24
Perrysburg, 271—Cattaraugus		
J. N. Adams Memorial (T.B.)	550	375
Philmont, 1,919—Columbia		
Columbia Sanatorium (T.B.)	46	36
Plattsburg, 11,552—Clinton		
Champlain Valley Hospital	75	60
Physicians' Hospital	43	23
Pomona, 145—Rockland		
Summit Park Sanatorium (T.B.)	46	45
Potsdam, 4,039—St. Lawrence		
Potsdam Hospital	12	6
Poughkeepsie, 35,670—Dutchess		
The Sadlier Hospital	10	8
Samuel W. Bowne Memorial Hospital (T.B.)	127	127
St. Francis' Hospital	85	65
Vassar Brothers Hospital ★	181	108
Pt. Chester, 19,283—Westchester		
United Hospital ★	100	72
Pt. Jefferson, 2,156—Suffolk		
St. Charles Hospital for Crippled Children & Brooklyn Home for Blind and Defective Children	320	230
Pt. Jervis, 10,507—Orange		
Deer Park Sanitarium	20	10
St. Francis Hospital	61	30
Rainbow Lake, 25—Franklin		
Rainbow Sanatorium (T.B.)	50	30
Remsen, 448—Oneida		
Whitesboro Sanitarium	20	9
Rhinebeck, 1,397—Dutchess		
Holiday Farm, Home for Convalescent Children	50	45
Thompson Hospital	12	7
Richland, —— —Oswego		
Oswego County Sanitarium (T.B.)	125	82
Richmond Hill, —— —Queens		
Jamaica Hospital	123	110
Rochester, 316,786—Monroe		
Highland Hospital ★	171	134
Lee Private Hospital	65	45
Monroe County Hospital	250	223
Monroe County Tuberculosis Sanatorium	285	251
Park Avenue Clinical Hospital	81	71
Rochester General Hospital ★	268	225
Rochester Homeopathic Hosp.★	120	110
Rochester Municipal Hospital	114	30
St. Mary's Hospital ★	179	118
Strong Memorial Hospital ★	230	New
Rockaway Beach, —— —Queens		
Neponsit Beach Hosp. for Children (T.B.)	120	100
Rockaway Beach Hospital and Dispensary	100	70
Rockville Center, 6,262—Nassau		
Rockville Center Sanitarium	20	15
Rome, 30,328—Oneida		
Oneida County Hospital	175	140
Rome Hospital	50	32
Rome Infirmary	42	22
Salamanca, 9,276—Cattaraugus		
City Hospital	26	23
Salisbury Center, 300—Herkimer		
Pine Crest Sanatorium (T.B.)	68	68
Santa Clara, 150—Franklin		
Vacation Home for Tuberculous Working Girls	57	48
Saranac Lake, 4,983—Franklin		
General Hospital of Saranac Lake	20	10
Reception Hospital (T.B.)	20	20
St. Mary's of the Lake (T.B.)	30	28
Saratoga Springs, 13,884—Saratoga		
Dr. R. H. McCarty's Hospital	25	12
Saratoga Hospital	83	47
Schenectady, 92,786—Schenectady		
Ellis Hospital ★	239	154
Glenridge Sanatorium (T.B.)	112	100
Isolation Hospital	32	8
Sea Cliff, 2,108—Nassau		
Country Home for Convalescent Babies	38	38
Seneca Falls, 6,389—Seneca		
Seneca Falls Hospital	21	10
Sherburne, 1,104—Chenango		
Brookside Crest Sanitarium (T.B.)	22	16
Sodus, 1,329—Wayne		
Northern Wayne Hospital	35	20
Southampton, 2,635—Suffolk		
Southampton Hospital	57	33
St. Joseph's —— —Sullivan		
St. Joseph's Sanatorium	225	175
Staten Island, 115,959—Richmond		
Richmond Memorial Hospital	26	7
Sailor's Snug Harbor Hospital	250	150
Seaside Hospital	200	160
Sea View Hospital (T.B.)	1,000	907
Staten Island Hospital ★	162	109
St. Vincent's Hospital	87	65
Suffern, 3,154—Rockland		
Good Samaritan Hospital	36	18
Syracuse, 182,003—Onondaga		
City Hospital	162	60
Crouse-Irving Hospital	170	160
General Hospital of Syracuse	69	50
Hospital of the Good Shepherd ★	250	178
Onondaga General Hospital	30	21
Onondaga Sanatorium (T.B.)	168	165
Peoples Hospital	33	16
St. Joseph's Hospital	50	46
St. Mary's Maternity and Infant Hospital	25	20
Syracuse Memorial Hospital ★	139	109
Tarrytown, 5,807—Westchester		
Tarrytown Hospital	44	22
Taughannock Falls, —— —Tompkins		
Tompkins County Tuberculosis Hospital	32	27
Ticonderoga, 2,102—Essex		
The Moses-Ludington Hospital	40	20
Troy, 72,223—Rensselaer		
Leonard Hospital	54	40
Marshall Sanitarium (N.& M.)	60	35
Samaritan Hospital ★	166	107
Troy Hospital	250	150
Trudeau, 225—Essex		
Trudeau Sanatorium (T.B.)	150	150
Tuckahoe, 3,509—Westchester		
St. Eleanora's Home for Convalescents	50	50
Tupper Lake, 2,508—Franklin		
Mercy General Hospital	20	9
Tuxedo Park, 2,000—Orange		
Tuxedo Memorial Hospital	27	16
Utica, 101,604—Oneida		
Faxton Hospital	130	86
St. Elizabeth's Hospital	93	67
Utica General Hospital	118	47
St. Luke's Home & Hospital	123	80
Utica Homeopathic Hospital	63	45
Valhalla, 600—Westchester		
Grasslands Hospital ★	400	319
Milbank Memorial Home for Convalescent Boys	50	New
Warsaw, 3,622—Wyoming		
Wyoming Co. Community Hosp.	55	29
Warwick, 2,420—Orange		
Warwick Hospital and Clinic	22	15
Waterloo, 3,931—Seneca		
Waterloo Memorial Hospital	15	7
Watertown, 32,836—Jefferson		
House of the Good Samaritan	102	89
Jefferson Co. Tuberculosis Sanatorium	36	24
Mercy Hospital	94	50
Wellsville, 5,046—Allegany		
Jones' Memorial Hospital	32	19
Wellsville Sanitarium	30	15
West Haverstraw, 2,018—Rockland		
New York State Orthopedic Hospital	192	192
White Plains, 27,428—Westchester		
Bloomingdale Hosp. (N.& M.) †	350	278
Blythedale Home for Convalescent Crippled Children	60	45
Campbell Convalescent Cottages	85	80
Mary Zinn Home for Convalescent Children	43	40
Dr. Meyer's Private Hospital	36	27
New York Orthopedic Dispensary and Hospital	166	165
St. Agnes' Hospital	210	150
White Plains Hospital Ass'n	103	55
Winifred Masterson Burke Relief Foundation	290	266
Whitestone, —— —Queens		
Dr. Harrison's Sanitarium (N.& M.)	35	30
Williamsville, 1,105—Erie		
The Josephine Goodyear Convalescent Home	40	35
Woodhaven, —— —Queens		
St. Anthony's Hospital (T.B.)	372	350
Wynantskill, 190—Rennsselaer		
Pawling Sanitarium (T.B.)	185	163
Yonkers, 113,647—Westchester		
Neustadter Convalescent Home	58	39
Sprain Ridge Hospital (T.B.)	24	21
St. John's Riverside Hospital ★	100	75
St. Joseph's Hospital ★	101 (a)	60
Yonkers City Hospital for Communicable Diseases	100	25
Yonkers Homeopathic Hospital and Maternity	123	57
Yonkers Tuberculosis Hospital	58	38
Five General Hospitals of less than 10 beds	35	17
Total for community use, 456	55,744	41,375

In New York the following six counties have no hospitals for community use: Greene, Hamilton, Lewis, Schoharie, Tioga, Yates.

NORTH CAROLINA

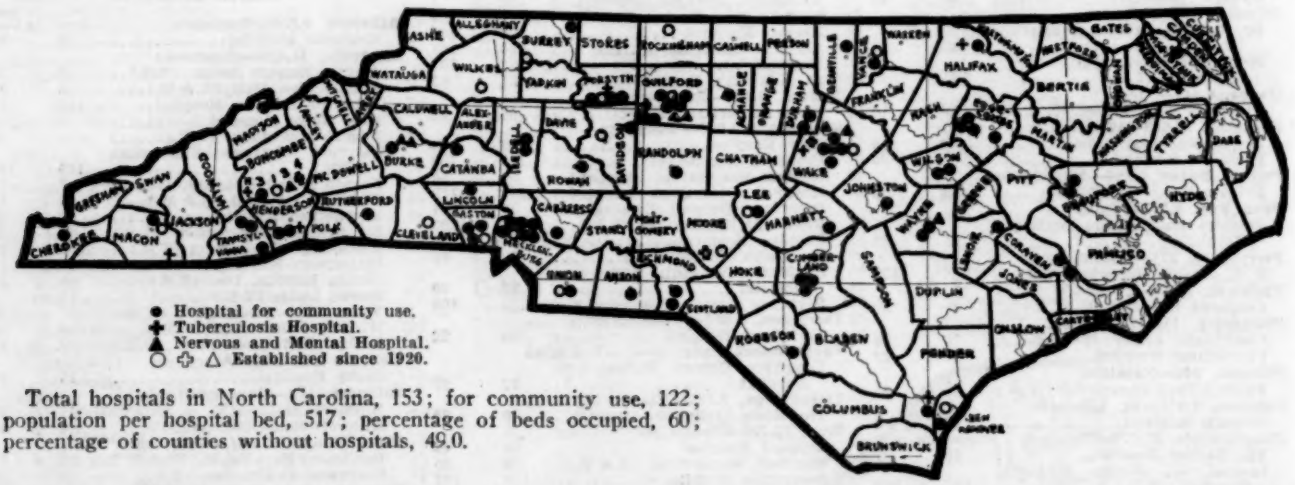
	Total Beds	Av.Beds in Use
Asheboro, 2,559—Randolph		
Memorial Hospital	23	20
Asheville, 31,474—Buncombe		
Ambler Heights Sanat. (T.B.)	50	35
Appalachian Hall (N.& M.)	50	30
Asheville Mission Hospital	100	55
Blue Ridge Hospital	20	15
Edgewood Cottage (T.B.)	20	18
Fairview Cottage Sanitarium (T.B.)	120	105
French Broad Hospital, Inc.	63	42
Highland Hospital (N.& M.)	80	56
Meriwether Hospital	53	29
St. Joseph's Sanatorium (T.B.)	50	35
Stonehedge Sanitarium (T.B.)	24	18
Strawberry Hill Sanat. (T.B.)	25	12
Sunset Heights, Inc. (T.B.)	30	25
Sunset Lodge (T.B.)	12	5
Violet Hill Sanatorium (T.B.)	27	20
Winyah Sanatorium (T.B.)	100	70
Zephyr Hill Sanatorium (T.B.)	38	24
Banners Elk, 162—Avery		
Grace Hospital	15	10
Biltmore, 172—Buncombe		
Biltmore Hospital	44	30
Hillcroft Sanatorium (T.B.)	54	50
Black Mountain, 531—Buncombe		
Beallmont Park Sanat. (N.& M.)	20	15
Cragmont Sanatorium (T.B.)	40	30
Brevard, 1,658—Transylvania		
Brevard Hospital	15	8
Bryson City, 882—Swain		
Bryson City Hospital	20	8
Burlington, 5,952—Alamace		
Rainey Hospital	28	18
Charlotte, 53,318—Mecklenburg		
Charlotte E. E. and T. Hospital	20	12
Good Samaritan Hospital	50	28
Mercy Hospital	60	40
New Charlotte Sanatorium	75	75
Presbyterian Hospital	100	46
St. Peter's Hospital	55	43
Concord, 9,903—Cabarrus		
The Concord Hospital	25	8
Duke, 500—Harnett		
Good Hope Hospital	20	9
Durham, 42,258—Durham		
Lincoln Hospital	100	40
Watts' Hospital ★	118	87
Elizabeth City, 8,925—Pasquotank		
Elizabeth City Hospital	50	20
Elkin, 1,195—Surry		
Elkin Hospital	15	9
Fayetteville, 8,877—Cumberland		
Cumberland General Hospital	35	15
Highsmith Hospital	50	35
Pittman Hospital, Inc.	60	45
Fletcher, 50—Henderson		
Asheville Agricultural School and Mountain Sanatorium	20	7
Franklin, 773—Macon		
Angel's Hospital	30	20
The Lyle Hospital	20	10
Gastonia, 16,899—Gaston		
City Hospital	70	40
Gaston County Colored Hospital	23	12
Gaston County Sanatorium	30	15
North Carolina Orthopedic Hospital for Crippled Children of Sound Minds	60	60
Goldsboro, 14,234—Wayne		
Goldsboro City Hospital	35	15
Spicer's Sanatorium	30	20
Greensboro, 47,132—Guilford		
Glenwood Park Sanitarium (N.& M.)	35	25
Reaves E, E, N. and T. Infirmary	15	8
St. Leo's Hospital	100	88
Wesley Long Hospital	35	25
Williams Private Sanitarium	20	10
Greenville, 5,772—Pitt		
Pitt Community Hospital	21	10
Halifax, 299—Halifax		
Halifax County Tuberculosis Sanitarium	20	18
Hamlet, 3,659—Richmond		
Hamlet Hospital	75	35
Moncure Hospital	10	5
Henderson, 5,222—Vance		
Jubilee Hospital	15	10
Maria Parham Hospital	30	New
Hendersonville, 3,720—Henderson		
Dixon Health Resort	20	12
Edgemont Sanatorium (T.B.)	25	15
Patton Memorial Hospital	40	18

	Total Beds	Av. Beds in Use
Hickory, 5,076—Catawba		
Richard Baker Hospital	35	20
Highlands, 504—Macon		
Brookside Camp (T.B.)	20	10
High Point 23,646—Guilford		
Guilford General Hospital	35	20
High Point Hospital	62	52
Jamestown, 150—Guilford		
Guilford County Sanatorium (T.B.)	66	55
Kinston, 9,771—Lenoir		
Parrott Memorial Hospital, Inc.	40	20
Whiterock, 72—Madison		
Laurel Hospital	20	10
Wilmington, 37,061—New Hanover		
The Bulluck Hospital	35	16
Community Hospital	20	10
James Walker Memorial Hosp.★	134	75
Red Cross Sanatorium (T.B.)	25	14
Wilson, 12,818—Wilson		
Carolina General Hospital	45	25
Moore-Herring Hospital	25	12
Wilson Hospital and Tubercular Home	20	15

NORTH DAKOTA

	Total Beds	Av. Beds in Use
Arvilla, —— —Grand Forks		
Grand Forks County Hospital	50	40
Bismarck, 6,951—Burleigh		
Bismarck Evangelical Hosp.★	140	120
St. Alexius Hospital	109	96
Bottineau, 1,172—Bottineau		
St. Andrew's Hospital	35	15
Carrington, 1,420—Foster		
Carrington Hospital	20	10

NORTH CAROLINA



● Hospital for community use.
✚ Tuberculosis Hospital.
▲ Nervous and Mental Hospital.
○ ✣ △ Established since 1920.

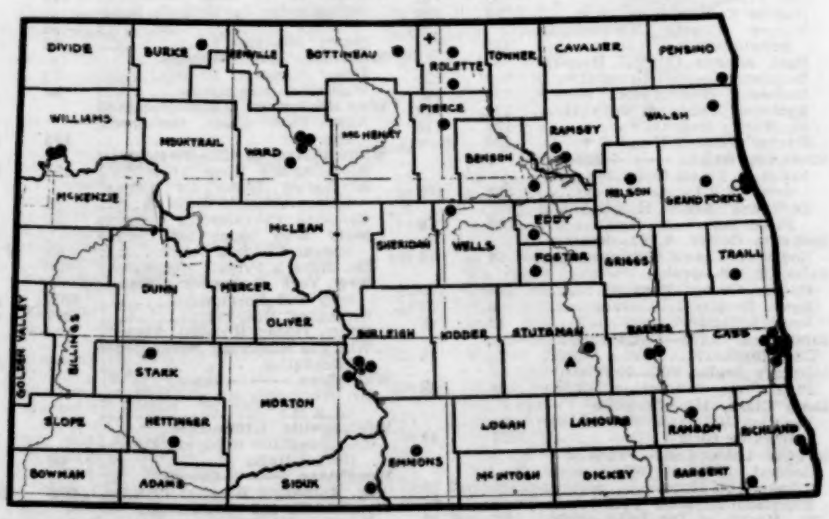
Total hospitals in North Carolina, 153; for community use, 122; population per hospital bed, 517; percentage of beds occupied, 60; percentage of counties without hospitals, 49.0.

	Total Beds	Av. Beds in Use
Leaksville, 1,606—Rockingham		
Leaksville Hospital, Inc.	27	11
Lexington, 5,254—Davidson		
Davidson Hospital	24	11
Lincolnton, 3,390—Lincoln		
Lincoln Hospital	35	17
Lumberton, 2,691—Robeson		
The Baker Sanatorium	65	42
Monroe, 4,084—Union		
Ellen Fitzgerald Hospital	70	28
Quality Hill Sanatorium	20	4
Morehead City, 2,958—Carteret		
Morehead City Hospital	25	15
Morganton, 2,867—Burke		
Broadoaks Sanatorium (N.& M.)	65	46
Grace Hospital	50	25
Mt. Airy, 4,752—Surry		
Martin Memorial Hospital	50	31
Murphy, 977—Cherokee		
Murphy Hospital	10	4
New Bern, 12,218—Craven		
New Bern General Hospital	21	8
St. Luke's Hospital	25	11
Northwilkesboro, 2,363—Wilkes		
The Wilkes Hospital	20	14
Oxford, 3,606—Granville		
Brantwood Hospital	25	16
Raleigh, 30,371—Wake		
Mary Elizabeth Hospital	30	20
McCauley Private Hospital	12	8
Rex Hospital ★	125	72
St. Agnes' Hospital	93	57
Roanoke Rapids, 3,369—Halifax		
Roanoke Rapids Hospital	50	39
Rocky Mount, 15,115—Edgecombe		
Atlantic Coast Line Hospital	50	31
Park View Hospital	70	50
Rocky Mount Sanitarium	40	25
Rutherfordton, 1,693—Rutherford		
Rutherford Hospital	60	35
Salisbury, 17,696—Rowan		
Salisbury Hospital	55	30
Sanford, 2,977—Lee		
Central Carolina Hospital	24	20
Scott Hospital	28	15
Shelby, 3,609—Cleveland		
Shelby Hospital	45	25
Smithfield, 1,895—Johnston		
Johnston County Hospital	35	New
Smithfield Hospital	19	9
Southern Pines, 743—Moore		
Pine Crest Manor Sanat. (T.B.)	50	44
Statesville, 7,895—Iredell		
Davis Hospital	50	42
Long's Sanatorium	50	37
Tarboro, 4,568—Edgecombe		
Edgecombe County Tuberculosis Sanitarium	30	New
Edgecombe General Hospital	35	22
Tryon, 1,067—Polk		
Tryon Infirmary	12	8
Wadesboro, 2,648—Anson		
Anson Sanatorium	50	21
Washington, 6,166—Beaufort		
River View Hospital	15	10
Washington Hospital	35	15
Winston-Salem, 69,031—Forsyth		
City Memorial Hospital	235	98
Forsyth County Tuberculosis Hospital	31	26
Lawrence-Cooke Clinic Hospital	43	20
North Carolina Baptist Hospital	90	45
Wrightsville Sound, —New Hanover		
The Babies' Hospital	25	14
Total for community use, 122	5,334	3,248

In North Carolina the following forty-nine counties have no hospitals for community use: Alexander, Alleghany, Ashe, Bertie, Bladen, Brunswick, Camden, Caswell, Chatham, Clay, Columbus, Currituck, Dare, Davie, Duplin, Franklin, Gates, Graham, Greene, Haywood, Hertford, Hoke, Hyde, Jackson, Jones, McDowell, Mitchell, Montgomery, Nash, Northampton, Onslow, Orange, Pamlico, Pender, Perquimans, Person, Pitt, Polk, Sampson, Scotland, Stanly, Stokes, Swain, Tyrrell, Warren, Washington, Watauga, Yadkin, Yancey.

	Total Beds	Av. Beds in Use
Devils Lake, 5,140—Ramsey		
General Hospital of Devils Lake	30	20
Mercy Hospital and Detention Hospital	50	35
Dickinson, 4,122—Stark		
St. Joseph's Hospital	40	19
Drayton, 637—Pembina		
Drayton Hospital	14	12
Fargo, 26,403—Cass		
Camp Maternity Hospital	15	7
Cass County Hospital	40	30
City Detention Hospital	50	2
St. John's Hospital ★	100	90
St. Luke's Hospital	150	90
Grafton, 2,512—Walsh		
Grafton Deaconess Hospital	35	20
Grand Forks, 14,811—Grand Forks		
Grand Forks City Hospital	18	5
Grand Forks Deaconess Hospital	85	55
St. Michael's Hospital	57	40
Harvey, 1,590—Wells		
St. Luke's Hospital	14	10

NORTH DAKOTA



● Hospital for community use.
✚ Tuberculosis Hospital.
▲ Nervous and Mental Hospital.
○ ✣ △ Established since 1920.

Total hospitals in North Dakota, 52; for community use, 40; population per hospital bed, 419; percentage of beds occupied, 65; percentage of counties without hospitals, 47.1.

	Total Beds	Av. Beds in Use
Jamestown, 6,627—Stutsman		
Trinity Hospital	50	41
Kenmare, 1,446—Ward		
Kenmare Deaconess Hospital	50	23
Lidgerwood, 1,065—Richland		
Lidgerwood Hospital	15	5
Mandan, 4,336—Morton		
Mandan Deaconess Hospital	30	15
Mayville, 1,218—Traill		
Union Hospital	12	3
McVille, 546—Nelson		
Community Hospital	14	7
Minot, 12,660—Ward		
McCannel's Private Hospital	16	10
St. Joseph's Hospital	72	37
Trinity Hospital	90	81
New England, 613,—Hettinger		
New England Hospital	16	9
New Rockford, 2,111—Eddy		
Donahue Hospital	14	6
Northwood, 935—Grand Forks		
Northwood Deaconess Hospital	14	7
Rolette, 409—Rolette		
Hayhurst Hospital	10	4
Rugby, 1,424—Pierce		
Good Samaritan Hospital	40	23
Valley City, 4,686—Barnes		
Barnes County Hospital	30	15
Wahpeton, 3,069—Richland		
Wahpeton Hospital	29	18
Williston, 4,178—Williams		
Mercy Hospital	50	25
Wittenberg Hospital	14	10
Three General Hospitals of less than 10 beds	19	9
Total for community use, 40	1,637	1,064

In North Dakota the following twenty-five counties have no hospitals for community use: Adams, Billings, Bowman, Cavalier, Dickey, Divide, Dunn, Golden Valley, Griggs, Kidder, La Moure, Logan, McHenry, McIntosh, McKenzie, McLean, Mercer, Mountrail, Oliver, Renville, Sargent, Sheridan, Slope, Steele, Towner.

OHIO

	Total Beds	Av. Beds in Use
Akron, 208,435—Summit		
Children's Hospital & Mary Day Nursery	65	57
City Hospital of Akron ★	191	127
Peoples Hospital	154	89
Alliance, 24,979—Stark		
Alliance City Hospital	100	40
Amherst, 2,485—Lorain		
Amherst Hospital	14	9
Ashland, 9,249—Ashland		
Samaritan Hospital	35	15
Ashtabula, 25,066—Ashtabula		
Ashtabula General Hospital	60	41
Athens, 6,418—Athens		
Sheltering Arms Hospital	17	5
Barberton, 23,286—Summit		
Citizens Hospital	40	19
Bellaire, 16,258—Belmont		
City Hospital of Bellaire	45	29
Bellefontaine, 9,336—Logan		
Harbert Hospital	10	6
Mary Rutan Hospital	21	6
Bellevue, 5,209—Huron		
Bellevue Hospital	27	14
Berea, 2,609—Cuyahoga		
The Community Hospital	32	10
Bowling Green, 5,788—Wood		
Bowling Green Sanitarium and Hospital	20	5
Bucyrus, 11,729—Crawford		
Monnette Memorial Hospital	21	8
Cambridge, 14,029—Guernsey		
Cambridge Hospital	15	4
Lawrence Hospital	15	8
Wells Hospital	24	16
Canton, 106,260—Stark		
Aultman Memorial Hospital	160	75
Mercy Hospital	73	57
Celina, 4,226—Mercer		
Otis Hospital	19	6
Chillicothe, 16,649—Ross		
Chillicothe Hospital	42	25
Mt. Logan Sanatorium (T.B.)	40	30
Cincinnati, 409,333—Hamilton		
Bethesda Hospital & Deaconess Ass'n.★	215	161
Bethesda Medical Hospital	65	46
Children's Hospital	85	57
Christ Hospital ★	145	124
Cincinnati General Hospital ★	700	481
Cincinnati Sanitarium (N.& M.)	100	91
Cincinnati Tuberculosis Sanat.	281	209
Deaconess Hospital	70	55
Derrick T. Vail's Private Hosp.	20	8
Good Samaritan Hospital ★	216	170
Grandview Hospital (N.& M.)	40	25
Home for Incurables	59	54
Jewish Hospital ★	242	124
Mithoefer Hospital	30	30
Murphy Memorial Hospital	12	4
Opthalmic Hospital	15	10
Psychopathic Institute of the Jewish Hospital	12	10
Rest Cottage (N.& M.)	12	6
Ridge Rest Home (N.& M.)	13	13
Rockhill Sanatorium (T.B.)	100	55
St. Francis Hospital for Incurables	357	340
St. Joseph's Maternity Hospital	40	20
St. Mary's Hospital ★	165	100
Dr. Edward H. Thompson Private E. E. N. & T. Hospital	10	8
Cleveland, 936,485—Cuyahoga		
Carnegie Avenue Hospital	20	14
Children's Fresh Air Camp and Hospital	60	60
Cleveland City Hospital ★	1,019	830
Cleveland Clinic Hospital	155	120
Cleveland Maternity Hospital	60	45
East 55th Street Hospital	45	16
Emergency Hospital	20	15
Euclid Hospital	14	6

● Hospital for community use. ▲ Nervous and Mental Hospital.
✚ Tuberculosis Hospital. ○ ✣ △ Established since 1920.

Total hospitals in Ohio, 306; for community use, 213; population per hospital bed, 373; percentage of beds occupied, 68; percentage of counties without hospitals, 28.4.

	Total Beds	Av. Beds in Use
Evangelical Hospital	28	13
Evangelical Lutheran Hospital	110	78
Fairview Park Hospital	80	64
Flower Hospital	14	8
Glenville Hospital	100	73
Grace Hospital	40	5
Holy Cross House for Crippled and Invalid Children	40	24
Huron Road Hospital	103	63
Joanna Private Hospital and Invalids Home	14	13
Lakeside Hospital ★	285	250
Lakewood Public Hospital	72	54
Mt. Sinai Hospital ★	218	199
Provident Hospital	24	18
St. Alexis Hospital ★	220	180
St. Ann's Infant Asylum and Maternity Hospital	75	55
St. John's Hospital ★	158	140
St. Luke's Hospital ★	165	115
St. Vincent's Charity Hospital ★	300	282
Windsor Sanitarium (N.& M.)	40	25
Woman's Hospital	87	70
Columbus, 279,836—Franklin		
Capital City General Hospital	11	New
Children's Hospital	75	34
Columbus Radium Hospital	50	24
Franklin County Sanat. (T.B.)	210	176
Dr. Gaver Sanat. (N.& M.)	25	20
Grant Hospital ★	303	222
McKinley Hospital	50	30
McMillen Sanitarium (N.& M.)	40	35
Mercy Hospital	65	39
Mt. Carmel Hospital ★	225	135
St. Ann's Infant and Maternity Hospital	25	18
St. Anthony's Hospital	264	250
St. Clair Hospital	30	15
St. Francis Hospital ★	160	115
Starling-Loving University Hosp.	187	48
White Cross Hospital ★	250	90
Conneaut, 9,343—Ashtabula		
Brown Memorial Hospital	25	15
Cortland, 750—Trumbull		
Dr. McCurley's Private Hospital	10	4
Coshocton, 11,552—Coshocton		
Coshocton City Hospital	42	18
Cuyahoga Falls, 13,700—Summit		
Fair Oaks Villa and Cottages (N.& M.)	60	56
Dayton, 172,942—Montgomery		
Dr. Hatcher's Private Hospital	16	12
Miami Valley Hospital ★	321	232
Orchard Springs Sanitarium (N.& M.)	29	17
Quarantine Hospital	25	1
St. Elizabeth Hospital ★	410	370
Stillwater Sanitarium (T.B.)	75	70
Defiance, 8,875—Defiance		
Defiance Hospital	14	9
Delaware, 8,756—Delaware		
Jane M. Case Hospital	35	14
Dennison, 5,524—Tuscarawas		
Twin City Hospital	24	13
Dover, 8,101—Tuscarawas		
Union Hospital	65	23
East Akron (Akron P.O.) Summit		
Springfield Lake Sanat. (T.B.)	220	181

	Total Beds	Av. Beds in Use
East Cleveland, 37,552—Cuyahoga		
Ream Sanatorium (N.& M.)	12	6
East Liverpool, 21,989—Columbiana		
East Liverpool City Hospital	75	50
Elyria, 23,832—Lorain		
Elyria Memorial Hospital (Gates Hospital for Crippled Children)	175	87
Euclid, 3,363—Cuyahoga		
Wright's Sanitarium (N.& M.)	20	10
Findlay, 18,246—Hancock		
The Home and Hospital of the City of Findlay	52	23
Fremont, 13,898—Sandusky		
Memorial Hospital of Sandusky County	50	23
Galion, 7,374—Crawford		
Good Samaritan Hospital	13	5
Gallipolis, 6,070—Gallia		
Holzer Hospital	52	24
Geneva, 3,081—Ashtabula		
Community Hospital	20	16
Greenfield, 4,344—Highland		
The Greenfield Hospital	15	10
Greenville, 7,104—Darke		
Greenville Hospital	14	6
Hamilton, 42,364—Butler		
Mercy Hospital	140	80
Ruth Hospital	22	10
Hillsboro, 4,356—Highland		
Hillsboro Hospital	20	7
Ironton, 14,492—Lawrence		
Charles S. Gray Deaconess Hospital	25	14
Marting Hospital	20	18
Kenton, 7,690—Hardin		
The McKitrick Hospital	21	16
San Antonio Hospital	17	6
Lancaster, 16,080—Fairfield		
Lancaster Municipal Hospital	45	17
Lima, 46,717—Allen		
District Tuberculosis Hospital	45	36
Lima Hospital Society	90	68
St. Rita's Hospital	100	60
Lodi, 1,240—Medina		
Lodi Hospital	10	7
Logan, 5,493—Hocking		
The Cherrington Hospital	35	15
Lorain, 42,259—Lorain		
St. Joseph's Hospital	120	57
Mansfield, 31,820—Richland		
Eleanor Thomas Sanitarium	20	15
Mansfield General Hospital	62	53
Marietta, 15,261—Washington		
Marietta Hospital	35	16
Tremont Hospital	15	8
Washington County Infirmary	100	50
Marion, 32,511—Marion		
Marion City Hospital	50	15
Sawyer Sanatorium (N.& M.)	50	35
Martins Ferry, 15,549—Belmont		
Martins Ferry Hospital	60	45
Marysville, 3,635—Union		
King's Daughters' Hospital	10	4
Massillon, 19,326—Stark		
Massillon Hospital	92	49
McConnelsville, 1,618—Morgan		
Rocky Glen Sanatorium (T.B.)	70	55
Middletown, 30,823—Butler		
Middletown Hospital	82	40
Montpelier, 3,052—Williams		
Wertz Hospital	10	4
Mt. Vernon, 9,237—Knox		
Hinde-Ball Mercy Hospital	31	10
Mt. Vernon Hospital-Sanitarium	40	18
Napoleon, 4,132—Henry		
S. M. Heller Memorial Hospital	14	6
Newark, 30,461—Licking		
Newark City Hospital	50	23
Newark Sanitarium	23	14
New London, 1,470—Huron		
New London Hospital	10	4
Norwalk, 7,379—Huron		
Norwalk City Hospital	23	11
Oberlin, 4,236—Lorain		
Allen Hospital	25	12
Oxford, 2,146—Butler		
The Oxford Retreat (N.& M.)	60	52
Painesville, 7,272—Lake		
Lake County Memorial Hospital	65	47
Perrysburg, 2,429—Wood		
Rheinfrank Hospital	12	10
Piqua, 15,979—Miami		
The Ball Memorial Hospital	40	24
Portsmouth, 39,087—Sciota		
Mercy Hospital	66	22
Portsmouth General Hospital	90	29
Schirrman Hospital	50	12
Pt. Clinton, 3,926—Ottawa		
Pool Hospital	16	9
Ravenna, 7,219—Portage		
Portage County Hospital	26	16
Salem, 11,075—Columbiana		
The Central Clinic and Hospital	42	25
Salem City Hospital	50	35
Sandusky, 24,542—Erie		
Good Samaritan Hospital	54	35
Providence Hospital	30	12
Shelby, 5,578—Richland		
Shelby Hospital	26	18
South Euclid, 1,695—Cuyahoga		
Rainbow Hospital for Crippled and Convalescent Children	100	87
Springfield, 68,725—Clark		
Clark County Tuberculosis Sanitarium	35	33
Hull Private Hospital	15	10
Springfield City Hospital ★	132	76
Steubenville, 31,973—Jefferson		
Gill Hospital	32	28
Ohio Valley Hospital	100	66
Tiffin, 15,552—Seneca		
Mercy Hospital	35	6
Toledo, 287,380—Lucas		
Alter, E, E, N. and T. Hosp.	13	8
City Isolation Hospital	30	10
East Side Hospital	26	21
Flower Hospital	47	36
Lucas County Branch Hospital	100	66
Lucas County Hospital ★	100	99
Lucas County Tuberculosis Hosp.	112	100
Maternity and Children's Hosp.	53	43
Mercy Hospital	100	50
Robinwood Avenue Hospital	69	48
St. Vincent's Hospital ★	350	205
Toledo Hospital ★	125	78
Toledo Sanitarium (N.& M.)	30	15
Troy, 7,260—Miami		
Coleman's Hospital	11	5
Urbana, 7,621—Champaign		
Champaign County Hospital	22	10
Van Wert, 8,100—Van Wert		
Van Wert County Hospital	45	18
Wadsworth, 4,742—Medina		
Wadsworth Municipal Hospital	22	11
Warren, 34,679—Trumbull		
St. Joseph's Riverside Hospital	40	28
Warren City Hospital	70	52
Warrensville, 150—Cuyahoga		
Cleveland City Infirmary	85	83
Cleveland Municipal Tuberculosis Sanatorium (T.B.)	280	230
Washington C. H., 7,962—Fayette		
Hodson Memorial Hospital (Homeopathic)	10	5
Willard, 3,889—Huron		
Blaine Hospital	20	8
Wilmington, 5,037—Clinton		
Dr. Kelley Hale Surgical Hosp.	17	10
Wooster, 8,204—Wayne		
Kinney and Knestrick Hospital	25	15
Wooster Hospital	30	16
Worthington, 705—Franklin		
Columbus Sanitarium (N.& M.)	25	15
Xenia, 9,110—Greene		
Espey Hospital	10	7
McClellan Hospital	15	10
Youngstown, 159,970—Mahoning		
St. Elizabeth's Hospital ★	175	141
Youngstown Hospital ★	200	200
Zanesville, 30,442—Muskingum		
Bethesda Hospital	200	80
Good Samaritan Hospital	125	65
Six General Hospitals of less than 10 beds	43	24
Total for community use, 213	16,932	11,640

In Ohio the following twenty-five counties have no hospitals for community use: Adams, Auglaize, Belmont, Brown, Carroll, Fulton, Geauga, Harrison, Holmes, Jackson, Madison, Meigs, Monroe, Morgan, Morrow, Noble, Perry, Pickaway, Pike, Preble, Putnam, Shelby, Vinton, Warren, Wyandot.

OKLAHOMA

OKLAHOMA	Total Beds	Av. Beds in Use
Ada, 8,012—Pontotoc		
Ada Hospital	25	5
Breco's Hospital	20	10
Altus, 4,498—Jackson		
City Hospital	25	10
Alva, 3,912—Woods		
Alva Hospital	15	7
Ardmore, 17,190—Carter		
Hardy Sanitarium	60	15
Von Keller Hospital Association	30	15
Bartlesville, 19,182—Washington		
Washington County Memorial Hospital	60	23
Blackwell, 7,174—Kay		
Blackwell Hospital	35	15
Bristow, 3,460—Creek		
Bristow General Hospital	18	10
Butler, 332—Custer		
Sunnyside Hospital	10	3
Cherokee, 2,017—Alfalfa		
Masonic Hospital	50	16
Chickasha, 10,179—Grady		
Chickasha Hospital	30	14
Cottage Hospital	48	15
Clinton, 2,396—Custer		
Clinton Hospital	34	19
Cordell, 1,855—Washita		
Florence Hospital	30	8
Cushing, 6,326—Payne		
Cushing Municipal Hospital	35	15
Drumright, 6,460—Creek		
Drumright Hospital	12	8

Total hospitals in Oklahoma, 113; for community use, 83; population per hospital bed, 736; percentage of beds occupied, 52; percentage of counties without hospitals, 46.7.

● Hospital for community use.
✚ Tuberculosis Hospital.
▲ Nervous and Mental Hospital.
○ ✣ △ Established since 1920.

	Total Beds	Av. Beds in Use
Duncan, 3,463—Stephens		
Ruth Hospital	20	12
Weedn Hospital	40	20
Durant, 7,340—Bryan		
Durant Hospital	35	16
Elk City, 2,814—Beckham		
Tisdal Hospital	50	18
El Reno, 7,737—Canadian		
El Reno Sanitarium	60	24
Enid, 18,150—Garfield		
Enid General Hospital	60	40
Enid Springs Sanitarium and Hospital	35	15
University Hospital	35	15
Erick, 971—Beckham		
McCreery Hospital	20	10
Fairfax, 1,342—Osage		
The Fairfax Hospital	20	11
Frederick, 3,822—Tillman		
Frederick Hospital	30	10
Guthrie, 11,813—Logan		
Duke Sanitarium (N.& M.)	35	27
Oklahoma Methodist Episcopal Hospital	35	24
Park Sanitarium	15	7
Henryetta, 5,889—Okmulgee		
Henryetta Hospital	35	15
Hobart, 2,936—Kiowa		
Huffman Hospital	20	15
Miles Sanitarium	15	7
Hominy, 2,875—Osage		
Hominy Hospital	21	New
Kingfisher, 2,447—Kingfisher		
Medical and Surgical Hospital	10	4
Lawton, 8,930—Comanche		
Southwestern Hospital	30	10
Mangum, 3,405—Greer		
Border Hospital	35	17
McAlester, 12,095—Pittsburg		
Albert Pike Hospital	50	30
St. Mary's Infirmary	20	8
Miami, 6,802—Ottawa		
Miami Baptist Hospital	50	17

	Total Beds	Av. Beds in Use
Muskogee, 32,175—Muskogee		
Muskogee City Contagious Hosp.	12	5
Muskogee General Hospital	75	50
Oklahoma Baptist Hospital	64	39
Dr. Tilly's Hospital	31	13
Oklahoma City, 91,295—Oklahoma		
Oklahoma City General Hospital	35	20
Oklahoma Cottage Sanat. (T.B.)	55	26
Oklahoma Tuberculosis Hospital	35	35
Oklahoma Lying-In-Hospital	12	6
Rolater Hospital	54	35
St. Anthony's Hospital ★	135	100
St. Luke's Hospital	50	25
State University Hospital ★	286	218
Tillsona Hospital	20	6
Wesley Hospital	55	40
Okmulgee, 25,269—Okmulgee		
Okmulgee City Hospital	65	35
Pauls Valley, 3,694—Garvin		
The Pauls Valley Sanitarium	15	4
Pawhuska, 6,414—Osage		
Pawhuska Municipal Hospital	50	21
Picher, 9,676—Ottawa		
American Hospital	40	20
Ponca City, 7,051—Kay		
Ponca City Hospital	38	25
Sand Springs, 4,076—Tulsa		
Home Hospital	30	21
Sapulpa, 14,207—Creek		
Employees' Hospital	28	10
Sentinel, 896—Washita		
Sentinel Hospital	12	7
Shattuck, 1,365—Ellis		
The Shattuck Hospital	18	10
Shawnee, 16,976—Pottawatomie		
Shawnee City Hospital	70	40
Stillwater, 4,701—Payne		
Stillwater Hospital	20	15
Sulphur, 3,684—Murray		
Williamson Hospital-Clinic	30	15
Thomas, 1,223—Custer		
The Thomas Hospital	20	10
Tulsa, 124,478—Tulsa		
Flower Hospital, Inc.	25	New
Grandview Hospital	55	17
Maurice Willows Hospital	25	13
Morningside Hospital	75	40
Oklahoma Hospital	52	30
Physicians and Surgeons Hosp.	30	26
Watonga, 1,678—Blaine		
Watonga Hospital	15	3
Woodward, 3,849—Woodward		
Woodward General Hospital	25	10
Yale, 2,601—Payne		
Mable Dale Hospital	14	3
Six General Hospitals of less than 10 beds	37	19
Total for community use, 83	3,041	1,592

In Oklahoma the following thirty-six counties have no hospitals for community use: Adair, Atoka, Beaver, Cherokee, Cimarron, Cleveland, Coal, Cotton, Craig, Delaware, Dewey, Grant, Harmon, Harper, Hughes, Jefferson, Johnston, Latimer, Le Flore, Love, McClain, McCurtain, McIntosh, Major, Marshall, Mayes, Noble, Nowata, Okfuskee, Pawnee, Pushmataha, Roger Mills, Rogers, Seminole, Sequoyah, Texas.

OREGON

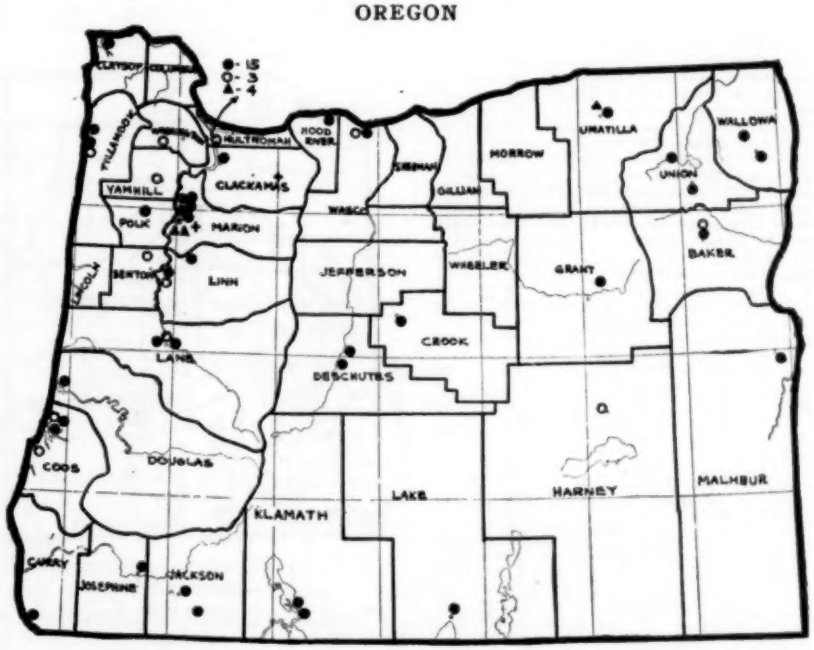
	Total Beds	Av. Beds in Use
Albany, 4,840—Linn		
Albany General Hospital, Inc.	30	17
St. Mary's Hospital	20	10
Ashland, 4,283—Jackson		
Community Hospital	18	10
Astoria, 16,535—Clatsop		
St. Mary's Hospital	92	60
Baker, 7,729—Baker		
Baker County Protestant Hosp.	24	12
St. Elizabeth's Hospital	63	35
Bend, 5,415—Deschutes		
Lumbermen's Hospital	21	7
St. Charles Hospital	25	13
Brookings, 515—Curry		
Southern Curry Hospital	12	5
Burns, 1,022—Harney		
Valley View Hospital	12	5
Corvallis, 5,752—Benton		
Anderson Surgical Hospital	10	6
Dallas, 2,527—Polk		
The Dallas Hospital	16	7
Enterprise, 1,895—Wallowa		
Enterprise Hospital	20	4
Eugene, 11,421—Lane		
Eugene Hospital	53	40
Mercy Hospital	60	27
Pacific Christian Hospital	48	40
Forest Grove, 1,775—Washington		
Via Hospital	20	10
Grants Pass, 3,151—Josephine		
Good Samaritan Hospital	12	6
Hood River, 3,195—Hood River		
Hood River Hospital	20	10
Hot Lake, 21—Union		
Hot Lake Sanatorium	65	58
Klamath Falls, 4,801—Klamath		
Klamath General Hospital	30	16
Klamath Valley Hospital	30	20
La Grande, 6,913—Union		
Grande Ronde Hospital	50	30
Lakeview, 1,139—Lake		
Lakeview Public Hospital	12	4
Marshfield, 4,034—Coos		
Smedberg Sanitarium	15	12
Wesley Hospital	55	20
McMinnville, 2,400—Yamhill		
McMinnville Hospital	21	12
Medford, 13,304—Jackson		
Sacred Heart Hospital	55	35
Milwaukee, 1,172—Clackamas		
Portland Open Air Sanitarium (T.B.)	76	67
North Bend, 3,268—Coos		
Keizer Brothers Hospital	40	37
Mercy Hospital	50	16
Ontario, 2,039—Malheur		
Holy Rosary Hospital	35	25
Oregon City, 5,686—Clackamas		
Oregon City Hospital	50	35
Pendleton, 7,387—Umatilla		
St. Anthony's Hospital	81	33
Portland, 282,383—Multnomah		
City of Portland Emergency Hospital	10	5
Derr Sanitarium	20	10
Elvers Sanitarium	12	3
Emanuel Hospital ★	100	76
Good Samaritan Hospital ★	314	263
Tillamook, 1,930—Tillamook		
Boals Hospital	52	18
Tillamook General Hospital	15	10
Toledo, 678—Lincoln		
Lincoln Hospital	20	New
Two General Hospitals of less than 10 beds	16	8
Total for community use, 67	3,427	2,406

In Oregon the following seven counties have no hospitals for community use: Columbia, Gilliam, Jefferson, Lincoln, Morrow, Sherman, Wheeler.

PENNSYLVANIA

	Total Beds	Av. Beds in Use
Abington, 800—Montgomery		
Abington Memorial Hospital ★	118	79
Adamsburg, 246—Westmoreland		
Adamsburg Health Home	14	3
Allentown, 92,151—Lehigh		
Allentown Hospital Ass'n.★	250	139
Baer Hospital for Women	15	10
Sacred Heart Hospital ★	160	112
Altoona, 66,148—Blair		
Altoona Hospital ★	162	104
Mercy Hospital	101	51

OREGON



● Hospital for community use. ▲ Nervous and Mental Hospital.
✚ Tuberculosis Hospital. ○ ✣ △ Established since 1920.

Total hospitals in Oregon, 89; for community use, 67; population per hospital bed, 246; percentage of beds occupied, 70; percentage of counties without hospitals, 19.4.

	Total Beds	Av. Beds in Use
Dr. House's Sanat. (N.& M.)	18	15
Isolation Hospital	70	20
Morningside Hospital (N.& M.)	280	247
Mountain View Sanitarium (N.& M.)	22	18
Multnomah County Hospital ★	185	165
Portland, E, E, N. & T. Hosp.	35	15
Portland Maternity Hospital	18	12
Portland Medical Hospital	35	34
Portland Sanitarium ★	100	80
Portland Surgical Hospital	70	55
Shriners Hospital for Crippled Children	50	50
St. Vincent's Hospital ★	370	325
Waverleigh Sanat. (N.& M.)	10	3
Woman's Hospital	35	17
Prairie City, 643—Grant		
Grant County Hospital	12	5
Prineville, 1,144—Crook		
Home Hospital	12	4
Roseburg, 4,381—Douglas		
Mercy Hospital	25	16
Salem, 19,709—Marion		
Salem Deaconess Hospital	90	50
Salem Hospital	50	48
Williamette Sanatorium	30	16
Silverton, 2,251—Marion		
Silverton Hospital	20	14
The Dalles, 5,807—Wasco		
The Dalles Hospital	70	40
Hamilton Hospital	20	20
Andalusia, 300—Bucks		
Convalescent Home	25	25
Ardmore, 10,075—Montgomery		
Wood Lea Sanitarium (N.& M.)	14	12
Ashland, 6,664—Schuylkill		
State Hospital	250	182
Austin, 1,556—Potter		
North Penn. Hosp. & Sanit.	25	10
Beaver Falls, 13,147—Beaver		
Providence Hospital	45	46
Bellefonte, 3,996—Center		
Center County Hospital	46	26
Bellevue, 8,198—Allegheny		
Suburban General Hospital	58	45
Berwick, 14,160—Columbia		
Berwick Hospital	50	31
Bethlehem, 62,828—Northampton		
St. Luke's Hospital ★	186	145
Bloomsburg, 7,819—Columbia		
Bloomsburg Hospital	50	34
Blossburg, 2,033—Tioga		
Blossburg State Hospital	80	68
Braddock, 21,739—Allegheny		
Braddock General Hospital	115	66
Bradford, 15,796—McKean		
Bradford Hospital	100	55
Brookville, 3,272—Jefferson		
Brookville Hospital	31	26
Brownsville, 2,502—Fayette		
Brownsville General Hospital	85	56
Bryn Mawr, 3,000—Montgomery		
Bryn Mawr Hospital ★	116	89

	Total Beds	Av. Beds in Use
Butler, 25,230—Butler		
Butler County Mem. Hosp.	109	43
Cambridge Springs, 1,863—Crawford		
Logan's Hospital	15	8
Canonsburg, 13,488—Washington		
Canonsburg General Hospital	34	32
Carbondale, 19,545—Lackawanna		
Carbondale City Hospital	20	16
Carbondale Emergency Hospital	65	50
Carlisle, 11,438—Cumberland		
The Carlisle Hospital	50	25
Chambersburg, 13,947—Franklin		
Chambersburg Hospital	90	32
Chester, 68,507—Delaware		
Chester Hospital *	250	90
J. Lewis Crozer Hospital	84	40
Clarks Summit, 1,404—Lackawanna		
Hillside Hospital (N.& M.)	700	500
Clearfield, 8,529—Clearfield		
Clearfield Hospital	96	68
Clifton Heights, 3,469—Delaware		
Burn Brae Hospital (N.& M.)	50	46
Coaldale, 6,336—Schuylkill		
Coaldale State Hospital	50	49
Coatesville, 16,457—Chester		
Coatesville Hospital	50	32
Columbia, 10,836—Lancaster		
Columbia Hospital	50	25
Colver, 2,060—Cambria		
Colver Hospital	18	6
Concordville, 400—Delaware		
Darlington Sanitarium	10	8
Confluence, 1,031—Somerset		
Frantz Hospital	15	11
Connellsville, 14,347—Fayette		
State Hospital	36	20
Conshohocken, 8,481—Montgomery		
Innwood Sanitarium (N.& M.)	25	20
Corry, 7,228—Erie		
Corry Hospital	40	25
Coudersport, 2,836—Potter		
Coudersport General Hospital	15	4
Danville, 6,952—Montour		
Geo. F. Geisinger Mem. Hosp.*	140	112
Dixmont, 1,200—Allegheny		
Dixmont Hospital (N.& M.)	977	675
Dixonville, 550—Indiana		
Two Licks Hospital	27	14
DuBois, 14,279—Clearfield		
Du Bois Hospital	50	24
Maple Avenue Hospital	69	32
Eagleville, —— —Montgomery		
Eagleville Sanatorium (T.B.)	130	126
Easton, 36,816—Northampton		
Betts' Private Hospital	45	30
Easton Hospital *	109	88
Easton Sanitarium (N.& M.)	30	20
East Stroudsburg, 5,278—Monroe		
General Hospital	41	14
Ellwood City, 8,958—Lawrence		
Ellwood City Hospital	25	11
Embreeville, 147—Chester		
Chester Co. Hospital (N.& M.)	346	345
Erie, 93,372—Erie		
Fisher E, E, N. & T. Hospital	15	5
Hamot Hospital Association *	187	124
Louise Home (T.B.)	16	14
Municipal Hospital	18	1
St. Vincent's Hospital *	214	140
Franklin, 9,970—Venango		
Franklin Hospital	47	15
Gettysburg, 4,439—Adams		
Annie M. Warner Hospital of Adams Co.	50	23
Gladwyne, 1,200—Montgomery		
Gladwyne Colony (N.& M.)	55	40
Glenside, 1,800—Montgomery		
Bramlett-Kerr Sanatorium	10	2
Greensburg, 16,056—Westmoreland		
Westmoreland Hospital	104	75
Greenville, 8,101—Mercer		
Greenville Hospital	60	34
Grove City, 4,944—Mercer		
Grove City Hospital	25	9
Harrisburg, 83,422—Dauphin		
Harrisburg Hospital *	200	122
Harrisburg Polyclinic Hospital	62	49
Keystone Private Hospital	21	18
Hazleton, 36,143—Luzerne		
Hazleton State Hospital	125	98
Hellwood, 2,045—Indiana		
Bethlehem Mines Hospital	18	5
Hollidaysburg, 4,071—Blair		
Blair Co. Hospital (N.& M.)	325	296
Homestead, 21,437—Allegheny		
Homestead Hospital	150	52
Honesdale, 2,756—Wayne		
Wayne Co. Memorial Hospital	25	11
Huntingdon, 7,051—Huntingdon		
J. C. Blair Memorial Hospital	68	47
Indiana, 7,043—Indiana		
Indiana Hospital	81	69
Jersey Shore, 6,103—Lycoming		
Jersey Shore Hospital	25	10
Dr. F. G. Sanford's Priv. Hosp.	12	8
Johnstown, 71,475—Cambria		
Barbara Sales Memorial Hosp.	15	5
Cambria Steel Co. Hospital	60	28
Conemaugh Valley Mem. Hosp.*	160	123
Lee Homeopathic Hospital	28	16
Mendenhall Maternity Hospital	16	12
Mercy Hospital of Johnstown	86	68
Municipal Hospital	50	25
Kane, 7,283—McKean		
Kane Summit Hospital	87	30
Kingston, 17,998—Luzerne		
Nesbitt West Side Hospital	69	42
Kittanning, 7,153—Armstrong		
Kittanning General Hospital	35	23
Lancaster, 56,505—Lancaster		
Lancaster Co. Hosp. and Hosp. for Insane	350	326
Lancaster General Hospital *	163	107
Rossmere Sanatorium (T.B.)	50	30
St. Joseph's Hospital	200	102
Latrobe, 9,484—Westmoreland		
Latrobe Hospital	59	32
Lebanon, 25,207—Lebanon		
Good Samaritan Hospital	71	26
Lebanon Sanatorium	25	22
Lewistown, 9,849—Mifflin		
Lewistown Hospital	44	25
Lock Haven, 8,557—Clinton		
Lock Haven Hospital	78	55
Lock No. 4, 532—Washington		
Charleroi-Monessen Hospital	30	20
Mayview, —— —Allegheny		
Pittsburgh City Hospitals	2,647	2,585
McKeesport, 49,097—Allegheny		
McKeesport Hospital *	160	145
McKees Rocks, 18,077—Allegheny		
Ohio Valley General Hospital	60	45
Meadville, 15,580—Crawford		
Meadville City Hospital	46	40
Spencer Hospital	75	42
Media, 4,109—Delaware		
Dermady Cottage Sanat. (T.B.)	25	25
Media Hospital	20	15
Oil City, 23,260—Venango		
Grandview Sanatorium (T.B.)	50	25
Oil City Hospital	56	32
Old Forge, 12,755—Lackawanna		
Taylor Hospital	44	35
Olyphant, 11,215—Lackawanna		
Blakely Home (N.& M.)	128	118
Palmerton, 7,168—Carbon		
Palmerton Hospital	65	52
Peckville, 3,915—Lackawanna		
Mid-Valley Hospital	50	29
Philadelphia, 1,979,364—Philadelphia		
American Hospital	40	35
American Oncologic Hospital	48	25
Anderson Hospital	67	55
Babies Hospital of Philadelphia	76	64
Belle Vista Sanat. (N.& M.)	75	75
Belmont Hospital	90	60
Chestnut Hill Hospital	96	74
Children's Homeopathic Hosp.	165	110
Children's Hosp. of Phila.	94	71
Clark-Bass Hospital	30	30
Diagnostic Hosp. of Phila.	15	5
Drexel Home & Children's Hosp.	44	30
Engelhardt Hospital (N.& M.)	20	20
Frankford Hospital *	113	80
Frederick Douglas Mem. Hosp. (Col.) *	78	50
Friends Hospital (N.& M.)	190	175
Garretson Hospital (N.& M.)	60	30
Germantown Disp. & Hospital *	175	100
Hahnemann Medical College & Hospital *	359	309
Henry Phipps Institute (T.B.)	50	35
Home for Consumptives	104	97

PENNSYLVANIA

● Hospital for community use.
✚ Tuberculosis Hospital.
▲ Nervous and Mental Hospital.
○ ✚ △ Established since 1920.

Total hospitals in Pennsylvania, 416; for community use, 314; population per hospital bed, 214; percentage of beds occupied, 75; percentage of counties without hospitals, 20.9.

	Total Beds	Av. Beds in Use
Melcroft, 18—Fayette		
Indian Creek Valley Hospital	20	12
Mercer, 1,932—Mercer		
Mercer Cottage Hospital	45	30
Mercer Sanitarium (N.& M.)	45	38
Meyersdale, 3,716—Somerset		
Meyersdale Hospital	12	4
Monaca, 3,838—Beaver		
Beaver Co. Sanatorium (T.B.)	49	47
Monongahela, 8,688—Washington		
Monongahela Memorial Hospital	72	36
Mont Clare, —— —Montgomery		
River Crest Preventorium	24	24
Mt. Pleasant, 5,862—Westmoreland		
Mt. Pleasant Mem. Hospital	50	27
Muncy, 2,054—Lycoming		
Muncy Valley Private Hospital	20	14
Nanticoke, 24,732—Luzerne		
State Hospital	90	75
New Brighton, 9,361—Beaver		
Beaver Valley General Hosp.	67	40
New Castle, 49,842—Lawrence		
New Castle Hospital	100	50
Shenango Valley Hospital	85	37
New Kensington, 14,412—Westmoreland		
Citizens General Hospital	89	65
Newton Square, 168—Delaware		
The Dunwoody Home	40	35
New Wilmington, 886—Lawrence		
Overlook Sanitarium	25	20
Norristown, 34,836—Montgomery		
Montgomery Hospital	103	67
River View Private Hospital	18	8
Northampton, 9,349—Northampton		
Dr. Haff's Private Hospital	50	25
Oakbourne, 32—Chester		
Penna. Epileptic Hospital	110	97
Hospital of the Prot. Epis Church *	450	347
Hosp. of the University of Penna.*	528	348
Hosp. of the Woman's Med.Col.*	112	72
Howard Hospital	82	58
Jefferson Med. College Hosp.*	578	434
Jewish Hospital Ass'n.*	210	175
Jewish Maternity Hospital	44	32
Jos. Price Memorial Hospital	60	30
Kensington Hosp. for Women	88	53
Kenwood Sanitarium (N.& M.)	35	32
Lankenau Hospital *	248	186
Maternity Hospital	38	11
Medico-Surgical & Polyclinic Hospital *	322	90
Memorial Hospital *	114	75
Mercy Hospital (Colored) *	90	60
Methodist Episcopal Hosp.*	238	201
Misericordia Hospital *	238	178
Mitchell Memorial Hospital	30	8
Mt. Sinai Hospital *	175	138
National Stomach Hospital	47	28
Northeastern Hosp. of Phila.	65	45
Northwestern General Hospital	56	41
Pennsylvania Hospital (N.& M.)	350	300
Pennsylvania Hospital * †	315	242
Philadelphia General Hospital *	2,000	1,616
Phila. Hosp. for Contag. Dis.	1,200	450
Phila. Hosp. for Mental Diseases	3,600	3,500
Phila. Lying-in Charity Hosp.	65	45
Phila. Orthopedic Hospital	136	83
Presbyterian Hospital *	269	166
Preston Retreat	50	35
Roseneath Farms	14	12
Rush Hospital for Consumption	133	82

	Total Beds	Av. Beds in Use
Samaritan Hospital ★	225	145
St. Agnes' Hospital ★	306	196
St. Christopher's Hospital for Children	65	40
St. Joseph's Hospital ★	175	95
St. Luke's Homeo. Hosp.	55	46
St. Mary's Hospital ★	200	128
St. Vincent's Hosp. for Women and Children	320	300
Stetson Hosp. of Phila.	65	40
West Phila. Gen'l Homeo. Hosp. and Dispensary	65	35
West Phila. Hosp. for Women	75	61
Widener Memorial Training School	50	25
Wills Hospital †	120	60
Women's Homeopathic Hosp. of Phila.★	175	100
Woman's Hospital of Phila.★	148	79
Woman's Southern Homeopathic Hospital	40	13
Philipsburg, 3,900—Center		
Dr. McGirk Sanitarium	20	15
Philipsburg State Hospital	77	58
Phoenixville, 10,484—Chester		
Phoenixville Hospital	85	40
Pittsburgh, 631,563—Allegheny		
Allegheny General Hospital ★	400	294
Belvedere General Hospital	35	20
Children's Hosp. of Pittsburgh	110	90
Elizabeth Steel Magee Hosp.†	160	118
Eye and Ear Hospital	55	34
Fairview Sanatorium (N.& M.)	14	12
Haddon Maternity Hospital	25	14
Homeopathic Hospital ★	143	145
Leech Farm Sanatorium (T.B.)	200	170
Mercy Hospital ★	556	510
Montefiore Hospital ★	58 (a)	50
Municipal Hosp. for Contag. Dis.	250	150
Passavant Hospital ★	134	110
Pittsburgh Hospital ★	106	79
Presbyterian Hospital ★	185	133
Rosella Foundling & Maternity Hospital	82	46
South Side Hospital ★	225	149
St. Francis Hospital ★	600	571
St. John's General Hospital ★	202	131
St. Joseph's Hospital & Disp.★	120	101
St. Margaret's Memorial Hosp. ★	132	82
Tuberculosis League Hospital	115	120
Wechsler Maternity Hospital	20	15
Western Penna. Hospital ★	500	384
Pittston, 19,759—Luzerne		
Pittston Hospital Association	55	51
Pottstown, 18,467—Montgomery		
Homeopathic Hospital	50	20
Pottstown Hospital	80	45
Pottsville, 22,804—Schuylkill		
Lemos B. Warne Hospital	52	32
A. C. Milliken Hospital	30	25
Pottsville Hospital ★	140	77
Punxsutawney, 11,021—Jefferson		
Adrian Hospital	65	42
Murray Sanitarium	15	10
Punxsutawney Hospital	55	30
Reading, 112,707—Berks		
Berks Co. Tuberculosis Sanat.	45	30
Homeopathic Med. & Surg. Hospital	82	45
Reading Hospital ★	138	89
St. Joseph's Hospital	130	100
Renovo, 5,877—Clinton		
Renovo Hospital	25	14
Retreat, 31—Luzerne		
Retreat Home & Hospital for Chronic Diseases	135	50
Retreat Mental Hospital	700	689
Ridgway, 6,037—Elk		
Elk Co. General Hospital	45	32
Ridley Park, 1,761—Delaware		
Taylor Hospital	75	28
Roaring Springs, 2,379—Blair		
Nason Hospital	58	25
Rochester, 6,957—Beaver		
Rochester General Hospital	88	70
Sayre, 8,078—Bradford		
People's Co-operative Hospital	35	3
Robert Packer Hospital ★	217	145
Schuylkill Haven, 5,437—Schuylkill		
G. H. Moore's Hospital	14	10
Schuylkill Co. Hosp. (N.& M.)	500	484
Scranton, 142,266—Lackawanna		
Coppinger's Private Hosp.	16	12
Dr. Evans Hospital	12	6
The Hahnemann Hospital ★	111	77
Lackawanna Co. Hospital (T.B.)	150	52
Mercy Hospital	100	85
Moses Taylor Hospital	100	90
Municipal Hosp. for Contag Dis.	50	1
Scranton Private Hospital	45	25
Scranton State Hospital ★	178	139
St. Joseph's Children & Mat. Hospital	200	92
St. Mary's Keller Memorial Hospital	45	30
West Side Hospital	65	55
The Woman's Hospital	16	6
Sellersville, 1,739—Bucks		
Grand View Hospital	35	24
Sewickley, 4,955—Allegheny		
Sewickley Valley Hosp. Ass'n.	45	30
Shamokin, 21,749—Northumberland		
State Hospital	85	70
Sharon, 24,963—Mercer		
Christian H. Buhl Hospital	125	60
Somerset, 3,121—Somerset		
Somerset Community Hospital	25	15
Somerset Co. Hospital (N.& M.)	490	412
Spangler, 3,035—Cambria		
Miner's Hospital of Northern Cambria	65	49
St. Marys, 6,967—Elk		
Andrew Kaul Memorial Hospital	44	20
Stroudsburg, 5,278—Monroe		
Monroe Co. Hospital	27	15
Sunbury, 16,827—Northumberland		
Mary M. Packer Hospital	60	27
Susquehanna, 3,764—Susquehanna		
Simon H. Barnes Mem. Hospital	20	12
Tarentum, 8,925—Allegheny		
Allegheny Valley Hospital	92	45
Titusville, 8,432—Crawford		
Titusville City Hospital	30	19
Troy, 1,419—Bradford		
Leona Terrace (N.& M.)	18	10
Uniontown, 15,692—Fayette		
Uniontown Hospital ★	164	130
Upland, 2,221—Delaware		
Bram Golter Institute	25	New
Valencia, 303—Butler		
Lillian Convalescent Rest	50	40
Warren, 13,116—Warren		
Warren General Hospital	80	54
Washington, 23,009—Washington		
Hillsview Sanitarium	56	50
Washington Hospital	106	55

RHODE ISLAND

● Hospital for community use.
✚ Tuberculosis Hospital.
▲ Nervous and Mental Hospital.
○ ✣ △ Established since 1920.

Total hospitals in Rhode Island, 38; for community use, 21; population per hospital bed, 250; percentage of beds occupied, 71; percentage of counties without hospitals, 20.0.

	Total Beds	Av. Beds in Use
Wayne, 2,750—Delaware		
Ivycroft Farm	16	10
Waynesboro, 9,720—Franklin		
Waynesboro Hospital	35	12
Wernersville, 797—Berks		
Grand-View Sanitarium	125	75
West Chester, 11,717—Chester		
Chester County Hospital ★	110	76
Homeopathic Hosp. of Chester County	62	32
White Haven, 1,438—Luzerne		
Clair Mont Sanatorium (T.B.)	12	6
Fern Cliff Sanatorium (T.B.)	20	15
Sunnyrest Sanitarium (T.B.)	55	52
White Haven Sanatorium (T.B.)	225	194
Wilkes-Barre, 77,644—Luzerne		
Mercy Hospital ★	165	129
Riverside Hospital	35	20
Wilkes-Barre General Hosp.★	220	173
Wyoming Valley Homeo. Hosp.	75	36
Wilkinsburg, 27,392—Allegheny		
Columbia Hospital ★	170	123
Williamsport, 42,656—Lycoming		
Williamsport Hospital	165	125
Williamsport Private Hospital	50	35
Williamstown, 2,878—Dauphin		
Williams Valley Hospital	20	5
Windber, 9,462—Somerset		
Windber Hospital	93	70
Woodville, 500—Allegheny		
Allegheny Co. Hosp. for Insane	1,300	1,300
Wyncote, 260—Montgomery	Beds	in Use
Crest View Sanitarium (N.& M.)	12	8
York, 49,074—York		
West Side Sanitarium	32	19
York Hospital ★	106	76
Five General Hospitals of less than 10 beds	36	17
Total for community use, 314	43,456	32,649

In Pennsylvania the following fourteen counties have no hospitals for community use: Bedford, Cameron, Clarion, Forest, Franklin, Fulton, Greene, Juniata, Perry, Pike, Snyder, Sullivan, Union, Wyoming.

RHODE ISLAND

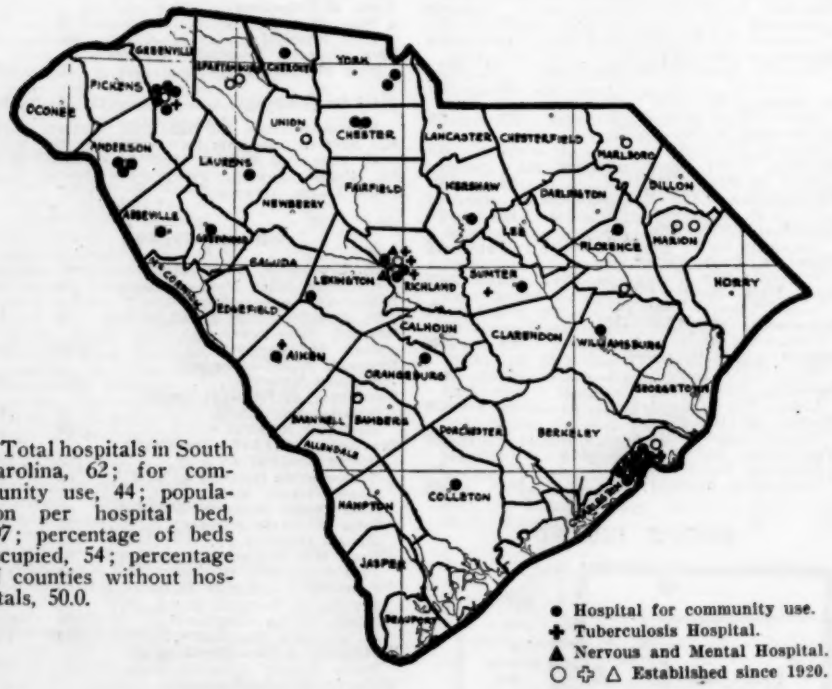
	Total Beds	Av. Beds in Use
East Greenwich, 3,420—Kent		
Crawford Allen Memorial Hosp.	50	50
Hillsgrove, —— —Kent		
St. Joseph's Sanit. Annex (T.B.)	86	70
Howard, 400—Providence		
State Infirmary ★ †	600	590
Newport, 27,757—Newport		
Newport Hospital	175	82
Pawtucket, 69,760—Providence		
Hospital Notre Dame	28	20
Memorial Hospital ★	100	80
Providence, 267,918—Providence		
Butler Hospital (N.& M.)	170	160
Homeopathic Hospital of R. I.	82	60
Hope Private Hospital	35	18
Jane Brown Memorial Hospital	86	45
John W. Keefe Surgery	20	10
Miriam Hospital	65	42
Park Hill Private Hospital	20	10
Providence City Hospital †	190	122
Providence Lying-in Hospital	60	41
Providence Surgical Hospital	32	15
Rhode Island Hospital ★	600	340
St. Joseph's Hospital ★	180	150
Wakefield, 2,170—Washington		
South County Hospital	23	5
Westerly, 9,952—Washington		
The Westerly Hospital	54	New
Woonsocket, 49,681—Providence		
Woonsocket Hospital	60	45
Total for community use, 21	2,716	1,955

In Rhode Island the following county has no hospital for community use: Bristol.

SOUTH CAROLINA

	Total Beds	Av. Beds in Use
Abbeville, 4,570—Abbeville		
Abbeville Co. Memorial Hospital	35	16
Aiken, 4,103—Aiken		
Aiken Cottages (T.B.)	18	8
Aiken Hospital	30	20
Anderson, 11,087—Anderson		
Anderson County Hospital	80	32
St. Mary's Hospital	32	12
University Sanitarium	50	24
Bennettsville, 3,197—Marlboro		
Bennettsville Hospital	24	12
Camden, 3,930—Kershaw		
Camden Hospital	55	26
Charleston, 73,125—Charleston		
Baker Sanatorium	50	30
McClennan Hospital	20	10
Mercy Hospital	17	10
Roper Hospital ★	270	178
St. Francis Xavier Infirmary	50	30
Chester, 5,557—Chester		
Chester Sanatorium	35	22
Pryor Hospital	60	32
Clinton, 3,767—Laurens		
Dr. Hays' Hospital	20	6
Columbia, 41,225—Richland		
Columbia Hospital of Richland County ★	125	76
Good Samaritan Hospital	46	25
South Carolina Baptist Hosp.★	125	74
Waverley Hospital	30	15
Waverley Sanitarium (N.& M.)	30	19
Florence, 13,182—Florence		
Florence Infirmary	125	83
Gaffney, 5,065—Cherokee		
City Hospital	25	10
Greenville, 27,311—Greenville		
Emma Moss Booth Mem. Hosp.	66	30
Greenville City Hospital ★	119	75
Hopewell Sanatorium (T.B.)	24	22
Dr. Jervey's Private Hospital	12	6
Montgomery Hospital	30	15
St. Luke's Hospital	25	10
Dr. Tyler's Hospital	12	6
Greenwood, 8,703—Greenwood		
Greenwood City Hospital	50	12
Kingstree, 2,074—Williamsburg		
Kelley Sanatorium	28	12
Lake City, 1,606—Florence		
The Lynch Infirmary	20	3
Leesville, 986—Lexington		
The Leesville Infirmary	35	15
Mullins, 2,379—Marion		
The Mullins Hospital	35	21
Navy Yard, —— —Charleston		
Pinehaven Sanatorium (T.B.)	50	20
Orangeburg, 7,290—Orangeburg		
The Orangeburg Hospital	38	30

SOUTH CAROLINA



Total hospitals in South Carolina, 62; for community use, 44; population per hospital bed, 797; percentage of beds occupied, 54; percentage of counties without hospitals, 50.0.

● Hospital for community use.
✚ Tuberculosis Hospital.
▲ Nervous and Mental Hospital.
○ ✣ △ Established since 1920.

	Total Beds	Av. Beds in Use
Rock Hill, 8,809—York		
Fennell Infirmary	60	20
Spartanburg, 25,537—Spartanburg		
Mary Black Clinic & Priv. Hosp.	50	32
Spartanburg General Hospital	98	50
Sumter, 9,508—Sumter		
Camp Alice, Sumter Co. T.B. Sanit.	18	15
Tuomey Hospital	40	30
Union, 6,141—Union		
Wallace Thompson Hospital	20	15
Waterboro, 1,853—Colleton		
Charles Es' Dorn Hospital	50	15
Total for community use, 44	2,232	1,224

In South Carolina the following twenty-three counties have no hospitals for community use: Allendale, Barnwell, Beaufort, Berkeley, Calhoun, Chesterfield, Clarendon, Darlington, Dillon, Dorchester, Edgefield, Fairfield, Georgetown, Hampton, Horry, Jasper, Lancaster, Lee, McCormick, Newberry, Oconee, Pickens, Saluda.

SOUTH DAKOTA

	Total Beds	Av. Beds in Use
Aberdeen, 15,036—Brown		
Lincoln Hospital	75	36
St. Luke's Hospital	100	60
Brookings, 3,924—Brookings		
Dakota Deaconess Hospital	14	8
Camp Crook, 163—Harding		
Camp Crook Hospital	10	3
Chamberlain, 1,303—Brule		
Chamberlain Sanit. & Hosp.	75	35
Deadwood, 2,403—Lawrence		
St. Joseph's Hospital	75	25
Dell Rapids, 1,677—Minnehaha		
Dell Rapids Hospital	35	22
Faulkton, 709—Faulk		
Faulk County Hospital	16	7
Flandreau, 1,929—Moody		
Flandreau Hospital	10	7
Garretson, 715—Minnehaha		
De Vall Hospital	10	4
Hot Springs, 2,141—Fall River		
Lutheran Sanit. and Hosp.	50	13
Our Lady of Lourdes Hosp. & Sanit.	75	29
Huron, 8,302—Beadle		
Sprague Hospital	50	35
Lead, 5,013—Lawrence		
Homestake Hospital	25	12
Madison, 4,144—Lake		
New Madison Hospital	50	24
Miller, 1,478—Hand		
McWhorter and Wheelock Hosp.	18	9
Mitchell, 8,478—Davison		
Methodist State Hospital	95	60
St. Joseph's Hospital	85	45
Mobridge, 3,517—Walworth		
Mobridge Hospital	30	10
Parkston, 1,230—Hutchinson		
Dr. J. L. Waldner's Hospital	12	5
Pierre, 3,209—Hughes		
St. Mary's Hospital	55	40
Rapid City, 5,777—Pennington		
Methodist Deaconess Hospital	50	34
Redfield, 2,755—Spink		
Baldwin Community Hospital	15	7
Sioux Falls, 30,127—Minnehaha		
McKennan Hospital	100	61
Moe Hospital and Clinic	70	30
Sioux Falls Lutheran Hospital	35	28
Sisseton, 1,431—Roberts		
Powell Hospital	18	10
Vermilion, 2,590—Clay		
Vermilion Hospital	20	10
Volga, 600—Brookings		
Volga Hospital	18	13
Watertown, 9,400—Codington		
Bartron Hospital	60	24
Luther Hospital	57	44
Webster, 1,800—Day		
Peabody Hospital	88	35
Yankton, 5,024—Yankton		
Sacred Heart Hospital	100	74
Four General Hospitals of less than 10 beds	26	11
Total for community use, 37	1,622	870

In South Dakota the following thirty-six counties have no hospitals for community use: Aurora, Bennett, Bon Homme, Butte, Campbell, Clark, Corson, Deuel, Dewey, Douglas, Edmunds, Grant, Gregory, Haakon, Hamlin, Hanson, Hyde, Jackson, Jerauld, Jones, Kingsbury, Lincoln, McCook, McPherson, Marshall, Perkins, Potter, Sanborn, Stanley, Sully, Tripp, Turner, Union, Washabaugh, Washington, Ziebach.

TENNESSEE

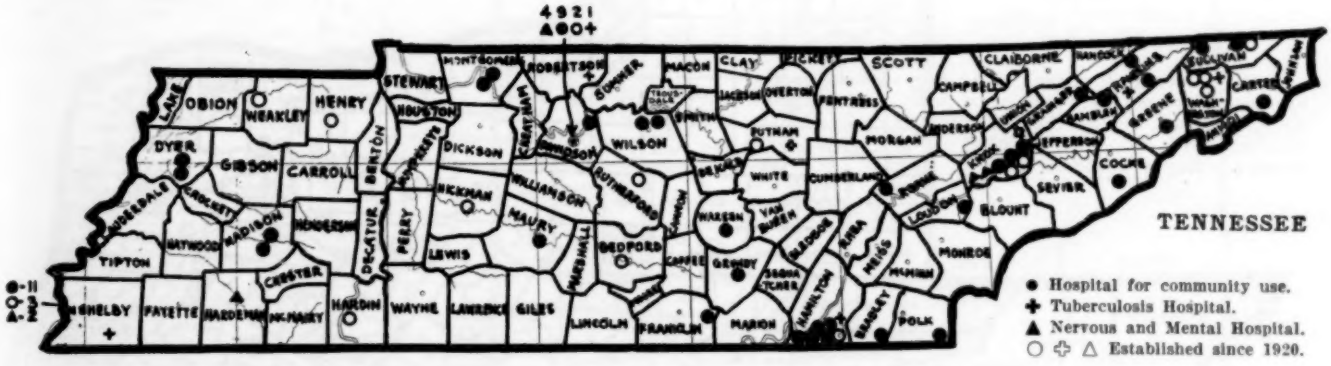
	Total Beds	Av. Beds in Use
Bristol, 8,047—Sullivan		
Mercy Hospital	18	13
Centerville, 882—Hickman		
Edwards' Infirmary	12	8
Chattanooga, 66,575—Hamilton		
Baroness Erlanger Hospital ★	186	116
Chattanooga Hospital	60	20
Mountain City Sanitarium	15	7
Newell & Newell Sanitarium	65	35
Pine Breeze Sanitarium (T.B.)	140	108
Clarksville, 8,110—Montgomery		
Clarksville Home Infirm. (Col.)	28	10
Clarksville Hospital	28	9
Cleveland, 6,522—Bradley		
Speck Hospital, Inc.	26	12
Columbia, 5,526—Maury		
Kings Daughters' Hospital	30	15
Cookeville, 2,395—Putnam		
Howard Hospital	15	2
Copperhill, 1,500—Polk		
Tennessee Copper Co.'s Hosp.	12	6
Dyersburg, 6,444—Dyer		
Baird-Dulaney Hospital	50	15
Dyersburg General Hospital	50	24
Elizabethton, 2,749—Carter		
Elizabethton General Hospital	20	8
Fountain City, (Knoxville P.O.), 500—Knox		
Dr. H. E. Goetz Sanitarium (N.& M.)	30	25
Greeneville, 3,775—Greene		
Greeneville Sanat. and Hosp.	23	12
Jackson, 19,925—Madison		
Crook Sanatorium	65	25
Memorial Hospital	50	25
Johnson City, 14,362—Washington		
Appalachian Hospital	50	25
Johnson City General Hospital	22	12
Jones E. E. N. & T. Hospital	18	10
Kingsport, 5,692—Sullivan		
Riverview Hospital	25	15
Knoxville, 95,464—Knox		
Beverly Hills Sanatorium (T.B.)	62	35
Ft. Sanders Hospital	65	46
Knoxville General Hospital ★	200	125
Riverside Hospital	50	33
Lebanon, 4,084—Wilson		
Lillard's Infirmary	18	6
McFarland Hospital	10	5
Loudon, 1,881—Loudon		
J. J. Harrison, Jr. Sanitarium	25	10
Madison, 50—Davidson		
Madison Rural Sanitarium	45	45
Martin, 2,837—Weakley		
Weakley County Hospital Ass'n.	18	6
McMinnville, 2,814—Warren		
McMinnville Infirmary	10	5
Memphis, 174,533—Shelby		
Baptist Memorial Hospital ★	325	248
Crippled Children's Hospital-School	37	34
Gartly-Ramsey Hospital	32	30
Hospital for Crippled Adults	30	30
Jane Terrell Baptist Hospital (Col.)	110	78

SOUTH DAKOTA

● Hospital for community use.
✚ Tuberculosis Hospital.
▲ Nervous and Mental Hospital.
○ ✣ △ Established since 1920.

Total hospitals in South Dakota, 58; for community use, 37; population per hospital bed, 420; percentage of beds occupied, 53; percentage of counties without hospitals, 52.1.

	Total Beds	Av.Beds in Use
Lynnhurst Sanitarium (N.& M.)	20	16
Memphis General Hospital ★	350	267
Methodist Hospital	110	80
Royal Circle Hospital (Col.)	41	15
Shelby County Hospital	450	385
St. Joseph's Hospital ★	250	205
Wallace Sanitarium (N.& M.)	50	30
Willis C. Campbell Clinic	44	35
Wilson Hospital	50	30
Woman's Hospital	55	24
Monterey, 1,445—Putnam		
Officer Sanatorium (T.B.)	15	5
Morristown, 5,875—Hamblen		
Morristown General Hospital	30	12
Nashville, 136,220—Davidson		
Baptist Hospital	89	49
The Barr Infirmary	25	15
City View Sanitarium (N.& M.)	65	40
Davidson Co. Hosp. (N.& M.)	300	275
Davidson County Isolation Hosp.	40	25
Davidson Co. Tuberculosis Hosp.	40	25
Dr. Douglas' Sanit. (N.& M.)	12	7
East Side Hosp. & Sanit.	25	New
Geo. W. Hubbard Hosp. (Col.) ★	140	55
Millie E. Hale Hospital (Col.)	60	40
Nashville City Hospital ★	150	93
Protestant Hospital ★	82 (a)	60
St. Thomas Hospital ★	200	135
Vanderbilt University Hosp.★	180	100
Newport, 2,753—Cocke		
E. E. Northcutt Hospital	12	4
Oakville, 150—Shelby		
Oakville Memorial Sanat. (T.B.)	200	190
Paris, 4,730—Henry		
Hoyland General Hospital	15	4
Wiggins Clinic	15	8
Ballinger, 2,767—Runnels		
Haley and Love Sanitarium	25	15
Bastrop, 1,828—Bastrop		
F. A. Orgain Memorial Hospital	20	6
Bay City, 3,454—Matagorda		
Dr. Loos' Hospital	14	5
Beaumont, 50,615—Jefferson		
Hotel Dieu Hospital ★	150	100
Beeville, 3,063—Bee		
Beeville Hospital	35	12
Belton, 5,098—Bell		
Belton General Hospital	15	10
Boerne, 1,153—Kendall		
St. Mary's Sanitarium (T.B.)	40	28
Bonham, 6,008—Fannin		
S. B. Allen Memorial Hospital	35	15
Brady, 2,197—McCulloch		
Brady Sanitarium	30	12
Breckenridge, 1,846—Stephens		
Breckenridge Sanitarium	20	8
Brenham, 5,066—Washington		
Brenham Hospital	13	6
Brownsville, 12,512—Cameron		
Mercy Hospital	40	9
Brownwood, 8,223—Brown		
Central Texas Hospital	30	15
Miss Stumpp's Sanitarium	10	5
Cameron, 4,298—Milam		
Cameron Hospital	50	21
Canadian, 2,187—Hemphill		
Canadian Hospital	15	10
Clarendon, 2,456—Donley		
Adair Hospital	12	5
Cleburne, 14,162—Johnson		
Cleburne Sanitarium	20	10
Meadow Lawn Sanitarium	20	8
Long-Liddell Sanatorium (T.B.)	50	20
Price Sanatorium (T.B.)	24	12
Providence Hospital	50	25
San Jose Nursing Home (T.B.)	15	8
Southern Baptist Sanat. (T.B.)	125	59
Ennis, 7,224—Ellis		
Municipal Hospital	20	10
Falfurrias, 750—Brooks		
The Falfurrias Hospital	20	10
Forney, 1,340—Kaufman		
Forney Sanitarium	25	20
Ft. Worth, 154,847—Tarrant		
All Saints Episcopal Hospital	50	32
Arlington Heights Sanitarium (N.& M.)	70	45
Baptist Hospital	65	42
Braswell's Sanitarium	26	14
City and County Hospital	57	35
Ft. Worth Children's Hospital	47	27
Harris' Hospital ★	100	73
Southwestern Hospital	50	35
St. Joseph's Infirmary	125	60
Gainesville, 8,648—Cooke		
Gainesville Sanitarium	25	25
Galveston, 48,375—Galveston		
John Sealy Hospital ★	308	268
St. Mary's Infirmary ★	200	112
Georgetown, 2,871—Williamson		
The Martin Hospital	25	8
Gonzales, 3,128—Gonzales		
Holmes Hospital	25	6
Gorman, 963—Eastland		
Blackwell Sanitarium	39	20
Graham, 2,544—Young		
Graham City Hospital	30	16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TENNESSEE
● Hospital for community use.
✚ Tuberculosis Hospital.
▲ Nervous and Mental Hospital.
○ ✣ △ Established since 1920.

Total hospitals in Tennessee, 101; for community use, 75; population per hospital bed, 440; percentage of beds occupied, 68; percentage of counties without hospitals, 65.2.

	Total Beds	Av.Beds in Use
Ridgetop, 126—Robertson		
Watauga Sanitarium (T.B.)	50	40
Rockwood, 4,652—Roane		
Chamberlain Memorial Hospital	40	20
Savannah, 758—Hardin		
Belle Morris Hospital	11	1
Sewanee, 530—Franklin		
Emerald-Hodgson Mem. Hosp.	50	15
Shelbyville, 2,912—Bedford		
Bedford County Hospital	25	12
One General Hospital of less than 10 beds	8	3
Total for community use, 75	5,499	3,755

In Tennessee the following sixty-two counties have no hospitals for community use: Benton, Bledsoe, Blount, Campbell, Cannon, Carroll, Cheatham, Chester, Claiborne, Clay, Coffee, Crockett, Cumberland, De Kalb, Decatur, Dickson, Fayette, Fentress, Gibson, Giles, Hancock, Hardeman, Haywood, Henderson, Houston, Humphreys, Jackson, Jefferson, Johnson, Lake, Lauderdale, Lawrence, Lewis, Lincoln, McMinn, McNairy, Macon, Marion, Marshall, Meigs, Monroe, Moore, Morgan, Obion, Overton, Perry, Pickett, Rhea, Robertson, Scott, Sequatchie, Sevier, Smith, Stewart, Sumner, Tipton, Trousdale, Union, Van Buren, Wayne, White, Williamson.

TEXAS

	Total Beds	Av.Beds in Use
Abilene, 10,456—Taylor		
Alexander Sanitarium	30	15
West Texas Baptist Sanit.	75	35
Amarillo, 17,780—Potter		
Northwest Texas Hospital	75	23
St. Anthony's Sanitarium	50	45
Austin, 37,717—Travis		
Austin City Hospital	60	60
Oaks Sanitarium (N.& M.)	25	20
Scott and Gregg Hospital	15	10
Seton Infirmary	150	65
St. David's Hospital	46	18
Coleman, 2,868—Coleman		
Overall Memorial Hospital	26	8
Colorado, 1,766—Mitchell		
Colorado Sanitarium	10	4
Cooper, 2,563—Delta		
Janes Sanitarium	12	5
Corpus Christi, 11,825—Nueces		
Spohn Hospital	50	46
Corsicana, 11,356—Navarro		
Navarro County Hospital	50	31
Cuero, 3,671—De Witt		
Boothe Hospital	35	6
Burns Hospital	35	7
Dalhart, 3,580—Dallam		
Trans-Canadian Sanitarium	20	10
Dallas, 194,450—Dallas		
Baylor Hospital ★	360	251
Bellerose Sanitarium	10	5
Cedar Maternity Sanitarium	20	10
Dallas Baby Camp & Hospital	45	20
Good Samaritan Hospital	18	5
Hella Temple Children's Hosp.	50	48
Hope Cottage	75	60
McMillan Sanitarium	23	11
Parkland Hospital ★	250	180
Samuell Clinic Hospital	26	18
St. Paul's Sanitarium ★	310	170
Timberlawn Sanit. (N.& M.)	40	34
Woodlawn Sanatorium (T.B.)	120	93
Denison, 19,008—Grayson		
Denison Hospital	25	12
Mercy Hospital	25	New
Mo. Kans. & Tex. R'y. Employees Hospital	65	25
Eagle Pass, 5,765—Maverick		
Gates' Hospital	17	4
El Paso, 104,929—El Paso		
El Paso County Hospital	100	70
El Paso Masonic Hospital	40	34
El Paso Smelter Hospital	18	7
Hendricks-Laws Sanat. (T.B.)	86	55
Homan Sanatorium (T.B.)	110	70
Hotel Dieu, Sisters Hospital	100	75
Greenville, 14,386—Hunt		
Dr. E. P. Becton's Hospital	17	3
Cantrell Hospital	47	42
Dr. A. S. McBride's Hospital (N.& M.)	35	13
Groesbeck, 1,522—Limestone		
Dr. Cox's Hospital	12	6
Hallettsville, 1,444—Lavaca		
Renger Hospital	15	6
Hamilton, 2,018—Hamilton		
Hamilton Sanitarium	50	25
Hereford, 1,696—Deaf Smith		
Deaf Smith County Hospital	20	3
Hillsboro, 6,932—Hill		
The Boyd Sanitarium	20	10
Houston, 164,954—Harris		
Baptist Hospital ★	200	164
Blair's Sanitarium	15	12
Dr. Greenwood's Sanit. (N.& M.)	40	25
Hermann Hospital	330	100
Houston E. E. & T. Hospital	14	8
Houston Tuberculosis Hospital	88	70
Jefferson Davis Hospital	150	82
Methodist Hospital	125	41
Southern Pacific Hospital †	100	68
St. Joseph's Infirmary ★	250	160
Jacksonville, 3,723—Cherokee		
Cherokee Sanitarium	29	14
Kerrville, 2,353—Kerr		
Hill Crest Sanatorium	14	10
Secor Sanitarium-Hospital	30	15
Thompson Sanatorium (T.B.)	86	75
Kingsville, 4,770—Kleberg		
Kleberg Co. Hospital	50	25
LaGrange, 1,660—Fayette		
LaGrange Hospital	25	15
Laredo, 27,159—Webb		
Mercy Hospital	35	20
Lockhart, 3,731—Caldwell		
Lockhart Sanitarium	15	8
Longview, 5,713—Gregg		
Markham Sanitarium	12	6

	Total Beds	Av. Beds in Use
Lubbock, 4,051—Lubbock		
Lubbock Sanitarium	60	33
West Texas Hospital	62	35
Lufkin, 4,878—Angelina		
Angelina Co. Hospital	35	22
Luling, 1,502—Caldwell		
Luling Hospital	20	8
Marlin, 4,310—Falls		
Buie Clinic & Marlin Sanit.	17	12
Torbett Sanatorium	35	21
Marshall, 15,867—Harrison		
Kahn Memorial Hospital	25	10
Tex. & Pacific Ry. Employees Hospital	100	48
McKinney, 6,677—Collin		
Burton E. E. N. & T. Sanit.	12	5
McKinney City Hospital	40	13
Mercedes, 3,414—Hidalgo		
Mercedes General Hospital	10	5
Mexia, 3,482—Limestone		
Brown Hospital	20	10
Mineral Wells, 7,890—Palo Pinto		
Mineral Wells Sanitarium	14	4

	Total Beds	Av. Beds in Use
San Antonio, 198,069—Bexar		
Baylor Hospital	50	45
Eye, Ear, Nose & Throat Hosp.	20	10
Dr. Farmer's Sanatorium (T.B.)	30	25
Grace Lutheran Sanat. (T.B.)	48	29
Dr. Kenney's Sanatorium	72	55
Lee Surgical Hospital	35	20
Matthews Home Sanitarium	20	10
Dr. Moody's Sanit. (N.& M.)	75	56
Physicians and Surgeons' Hosp.	75	50
Robert B. Green Mem. Hosp.★	135	100
Santa Rosa Infirmary ★	300	188
Woodmen of the World War Mem. Hosp. (T.B.)	200	135
San Marcos, 4,527—Hays		
Soldiers & Sailors' Mem. Hosp.	25	6
Schertz, 200—Guadalupe		
Karbach Hospital	15	10
Seguin, 3,631—Guadalupe		
Seguin Sanitarium	10	3
Shamrock, 1,227—Wheeler		
Shamrock General Hospital	15	4

	Total Beds	Av. Beds in Use
Teague, 3,306—Freestone		
City Hospital	20	10
Temple, 11,055—Bell		
Gulf, Colo. & Santa Fe Hosp.★	125	74
King's Daughters' Hospital	85	65
Scott & White Hospital ★	135	100
Texarkana, 12,437—Bowie		
Texarkana Sanit. & Hospital	50	30
Tyler, 13,037—Smith		
Tyler General Hospital	15	8
Vernon, 5,142—Wilbarger		
Vernon Hospital	25	12
Victoria, 5,957—Victoria		
Victoria Hospital Ass'n	35	12
Von Ormy, —— —Bexar		
Von Ormy Cottage Sanit. (T.B.)	40	30
Waco, 43,912—McLennan		
Central Texas Baptist Sanit.	100	65
Colgin Hospital and Clinic	35	16
Providence Sanitarium ★	150	104
Waxahachie, 7,958—Ellis		
New Waxahachie Sanitarium	32	20
Weatherford, 6,203—Parker		
Weatherford Sanitarium	35	18
Wharton, 2,346—Wharton		
Caney Valley Hospital	25	5
Wichita Falls, 40,079—Wichita		
Wichita General Hospital	110	70
Yoakum, 6,184—Lavaca		
Huth Memorial Hospital	50	13

TEXAS

- ● Hospital for community use.
- ✚ Tuberculosis Hospital.
- ▲ Nervous and Mental Hospital.
- ○ ✣ △ Established since 1920.

Total hospitals in Texas, 244; for community use, 191; population per hospital bed, 494; percentage of beds occupied, 59; percentage of counties without hospitals, 62.1.

	Total Beds	Av. Beds in Use
Moulton, 600—Lavaca		
Guenther Hospital	15	8
Nacogdoches, 3,546—Nacogdoches		
North Street Hospital	10	6
New Braunfels, 3,590—Comal		
City Hospital	14	6
Comal Sanitarium	30	12
Orange, 9,212—Orange		
Frances Ann Lutcher Hospital	65	38
Palestine, 11,403—Anderson		
International & Great North. R.R. Emp. Hospital	75	30
Palestine Sanitarium	25	12
Speegle's Sanitarium	12	7
Paris, 17,274—Lamar		
Sanitarium of Paris	50	43
St. Joseph's Infirmary	50	24
Plainview, 3,989—Hale		
Plainview Sanitarium	32	22
Pt. Arthur, 31,513—Jefferson		
Mary Gates Memorial Hospital	60	43
Merchant Marine Hosp. Service	10	3
Quanah, 3,691—Hardeman		
Quanah Sanitarium	25	15
Ranger, 16,205—Eastland		
City-County Hospital	30	10
San Angelo, 10,050—Tom Green		
The Bungalows (T.B.)	25	20
Prather Sanatorium (T.B.)	10	10
St. John's Sanitarium	30	20
San Angelo Sanatorium for Tuberculosis	25	18
Southwest Sanatorium (T.B.)	40	35

	Total Beds	Av. Beds in Use
Sherman, 16,528—Grayson		
Sherman Hospital	66	45
St. Vincent's Sanitarium	100	25
Spur, 1,100—Dickens		
Nichols Sanitarium	20	12
Stamford, 3,704—Jones		
Stamford Sanitarium	50	30
Sugar Land, 200—Fort Bend		
Laura Eldridge Mem. Hosp.	15	10
Taylor, 5,965—Williamson		
Dr. Floeckinger's Sanitarium	16	12
Taylor Sanitarium	20	10

	Total Beds	Av. Beds in Use
Yorktown, 1,723—De Witt		
Allen Hospital	20	12
Seven General Hospitals of less than 10 beds	49	25
Total for community use, 191	10,317	6,160

In Texas the following one hundred and fifty-seven counties have no hospitals for community use: Andrews, Aransas, Archer, Armstrong, Atascosa, Austin, Bailey, Bandera, Baylor, Blanco, Bosque, Brazoria, Brewster, Briscoe, Burleson, Burnet, Calhoun, Callahan, Carson, Cass, Castro, Chambers, Childress, Clay, Coch-

ran, Coke, Collingsworth, Colorado, Comanche, Concho, Coryell, Cottle, Crane, Crockett, Crosby, Culberson, Dawson, Denton, Dimmit, Duval, Ector, Edwards, Erath, Fisher, Floyd, Foard, Franklin, Frio, Gaines, Glasscock, Goliad, Gray, Grimes, Hall, Hansford, Hardin, Hartley, Haskell, Henderson, Hockley, Hood, Hopkins, Houston, Howard, Hudspeth, Hutchinson, Irion, Jack, Jackson, Jasper, Jeff Davis, Jim Hogg, Jim Wells, Karnes, Kent, Kimble, King, Kinney, Knox, LaSalle, Lamb, Lampasas, Lee, Leon, Liberty, Lipscomb, Live Oak, Llano, Loving, Lynn, McMullen, Madison, Marion, Martin, Mason, Menard, Midland, Mills, Montague, Montgomery, Moore, Morris, Motley, Newton, Nolan, Ochiltree, Oldham, Panola, Parmer, Pecos, Polk, Presidio, Rains, Randall, Reagan, Real, Red River, Reeves, Refugio, Roberts, Robertson, Rusk, Sabine, San Jacinto, San Patricio, San Saba, Schleicher, Scurry, Shackelford, Shelby, Sherman, Somervell, Starr, Sterling, Stonewall, Sutton, Swisher, Terrell, Terry, Throckmorton, Titus, Tyler, Upshur, Upton, Uvalde, Val Verde, Van Zandt, Walker, Ward, Willacy, Wilson, Winkler, Wise, Wood, Yoakum, Zapata, Zavalla.

UTAH

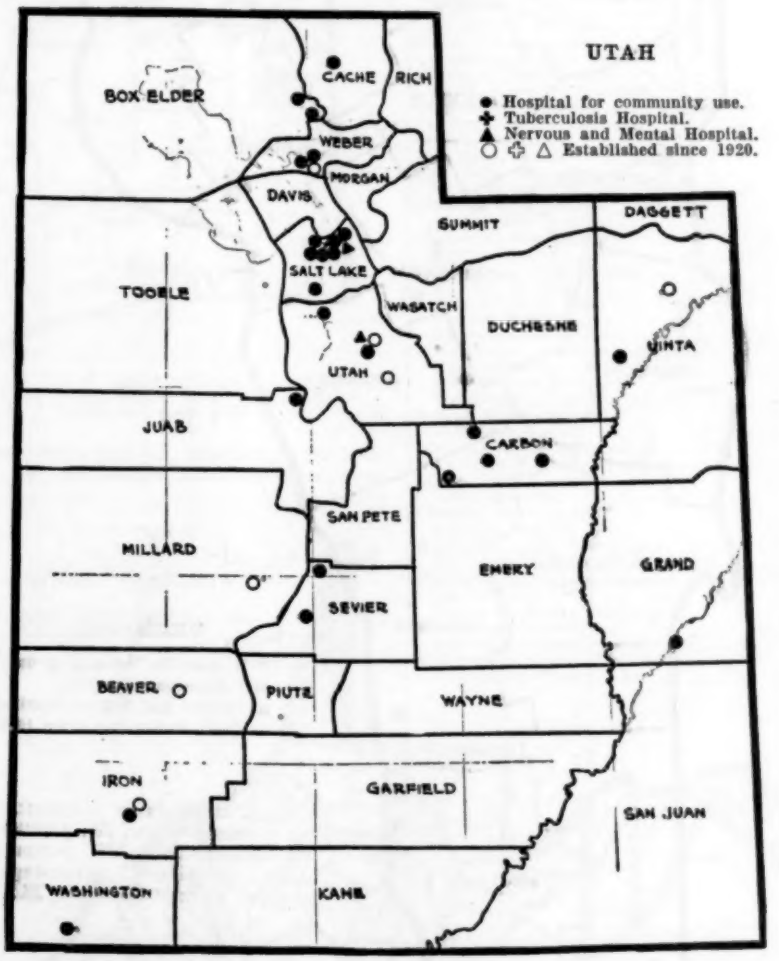
	Total Beds	Av. Beds in Use
Bingham Canyon, 2,676—Salt Lake		
Bingham Hospital	25	20
Brigham, 5,282—Box Elder		
Mahannah Hospital	10	5
Pearse Private Hospital	12	3
Cedar City, 2,462—Iron		
Iron County Hospital	25	12
Lehi, 3,078—Utah		
Lehi Hospital	13	5
Logan, 9,439—Cache		
Utah-Idaho Hospital	50	35
Mammoth, 970—Juab		
Tintic Hospital	20	10
Milford, 1,308—Beaver		
Community Hospital	10	5
Ogden, 36,869—Weber		
Thomas D. Dee Mem. Hosp.★	130	90
Price, 2,384—Carbon		
Carbon County Hospital	25	6
Provo, 11,184—Utah		
Aird Hospital	20	8
Richfield, 3,262—Sevier		
Richfield General Hospital	10	3
Salina, 1,451—Sevier		
Salina Hospital	20	9
Salt Lake City, 130,948—Salt Lake		
Dr. W. H. Groves Latter Day Saints' Hospital ★	225	176
Holy Cross Hospital ★	225	143
Mountain View Sanit. (N.& M.)	12	6
Salt Lake Co. General Hosp.★	185	134
St. Mark's Hospital ★	156	113
Spanish Fork, 4,036—Utah		
Hughes Memorial Hospital	10	5
St. George, 2,215—Washington		
Washington County Hospital	10	8
Vernal, 1,309—Uintah		
Vernal Hospital	10	4
Five General Hospitals of less than 10 beds	38	20
Total for community use, 26	1,241	820

In Utah the following fifteen counties have no hospitals for community use: Daggett, Davis, Duchesne, Emery, Garfield, Kane, Morgan, Piute, Rich, San Juan, Sanpete, Summit, Tooele, Wasatch, Wayne.

VERMONT

	Total Beds	Av. Beds in Use
Barre, 10,008—Washington		
Barre City Hospital	50	28
Washington County Hosp. (T.B.)	43	40
Bellows Falls, 4,860—Windham		
Rockingham General Hospital	28	19
Bennington, 7,230—Bennington		
Henry W. Putnam Mem. Hosp.	47	39
Brattleboro, 7,324—Windham		
Brattleboro Memorial Hospital	45	25
Brattleboro Retreat (N.& M.)	500	484
Melrose Hospital	35	18
Burlington, 24,089—Chittenden		
Bishop De Goesbriand Hosp.	100	80
Green Mountain Sanatorium	16	8
Lakeview Sanitarium (N.& M.)	25	16
Mary Fletcher Hospital ★	130	88
The Sparhawk Sanitarium	15	13
Hardwick, 1,550—Caledonia		
Hardwick Hospital	16	10
Montpelier, 7,125—Washington		
Heaton Hospital	61	43
Newport, 4,976—Orleans		
Orleans County Memorial Hosp.	40	22
Orleans, 1,358—Orleans		
Orleans Hospital	10	5
Pittsford, 1,200—Rutland		
Caverly Preventorium	44	44
Proctor, 2,692—Rutland		
Proctor Hospital	35	18
Randolph, 1,819—Orange		
Randolph Sanatorium	50	15
Rutland, 15,752—Rutland		
Rutland Hospital	60	47
Springfield, 5,283—Windsor		
Springfield Hospital	30	16
St. Albans, 7,598—Franklin		
Sherwood Sanitarium	10	8
St. Albans Hospital	50	26
St. Johnsbury, 7,163—Caledonia		
Brightlook Hospital Ass'n	34	27
Frost Sanitarium	17	8
St. Johnsbury Hospital	21	16
Winooski, 4,932—Chittenden		
Fanny Allen Hospital	55	22
One General Hospital of less than 10 beds	6	3
Total for community use, 28	1,573	1,188

In Vermont the following four counties have no hospitals for community use: Addison, Essex, Grand Isle, Lamoille.



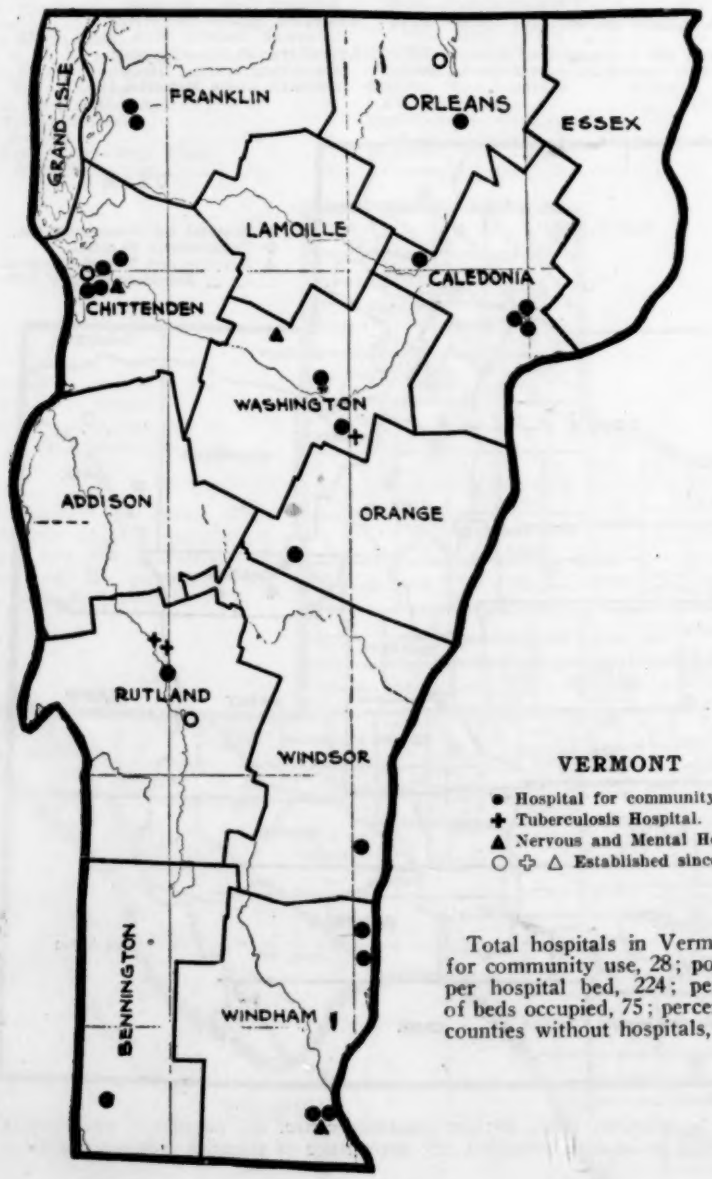
Total hospitals in Utah, 38; for community use, 26; population per hospital bed, 396; percentage of beds occupied, 65; percentage of counties without hospitals, 51.7.

VIRGINIA

	Total Beds	Av. Beds in Use
Abingdon, 2,532—Washington		
Geo. Ben Johnson Mem. Hosp.	53	41
Alexandria, 18,473—Arlington		
Alexandria Hospital	50	45
Bristol, 6,729—Washington		
King's Mountain Memorial Hosp.	50	25
Brook Hill, —— —Henrico		
Pine Camp Hospital (T.B.)	92	70
Charlottesville, 11,211—Albemarle		
Martha Jefferson Hospital, Inc.	55	32
Chase City, 1,646—Mecklenburg		
Chase City Hospital	26	12
Christiansburg, 1,641—Montgomery		
New Altamont Hospital	25	8
Clifton Forge, 6,164—Alleghany		
Chesapeake & Ohio Ry. Hosp.	95	52
Dante, 800—Russell		
Clinchfield Hospital	20	10
Danville, 22,964—Pittsylvania		
Danville General Hospital	75	29
Edmunds Hospital, Inc	50	29
Hilltop Sanatorium (T.B.)	35	35
Floyd, 399—Floyd		
The Floyd Hospital	10	3
Fredericksburg, 5,882—Spotsylvania		
Mary Washington Hospital	40	38
Hampton, 5,505—Elizabeth City		
Hampton School Hospital	75	32
Harrisonburg, 5,875—Rockingham		
Rockingham Memorial Hosp.	60	35
Hopewell, 1,397—Prince George		
Hopewell Hospital	30	12
Lebanon, 469—Russell		
St. Ann's Hospital	14	6
Leesburg, 1,545—Loudoun		
Loudoun County Hospital	25	14
Lexington, 2,870—Rockbridge		
Stonewall Jackson Mem. Hosp.	35	15
Lynchburg, 30,395—Campbell		
Lynchburg General Hospital	85	56
Marshall Lodge Memorial Hosp.	75	50
Martinsville, 3,746—Henry		
Lucy Lester General Hospital	30	11
Shackelford Hospital	30	25
Newport News, 47,083—Warwick		
Elizabeth Buxton Hospital	90	46
Riverside Hospital	62	30
Whittaker Memorial Hospital	50	25
Norfolk, 115,777—Norfolk		
Children's Hospital & Clinic	16	10
Hospital of St. Vincent de Paul ★	250	160
Mt. Sinai Hospital	50	12
Norfolk Protestant Hospital ★	150	90
Sarah Leigh Hospital	70	52
St. Christopher's Hospital	25	20
Tidewater Hospital	15	8
Petersburg, 35,712—Dinwiddie		
Crowder Memorial Hosp. (Col.)	25	7
Petersburg Hospital	80	55
Portsmouth, 59,029—Norfolk		
King's Daughters' Hospital	68	40
Parrish Memorial Hospital	50	20
Pulaski, 5,277—Pulaski		
Pulaski Hospital	15	8
Radford, 4,627—Montgomery		
St. Alban's Sanat. (N.& M.)	35	21
Richlands, 1,171—Tazewell		
Mattie Williams Hospital	27	20

	Total Beds	Av. Beds in Use
Richmond, 186,403—Henrico		
Grace Hospital	45	31
Hygeia Hospital	50	35
Johnston-Willis Hospital	82	71
Medical College of Va. Hosp.★	408	252
Retreat for the Sick★	100	73
Sara G. Jones Memorial Hosp.	25	14
Schermerhorn's School (N.& M.)	10	8
Sheltering Arms Free Hosp.	60	30
St. Elizabeth's Hospital	50	33
St. Luke's Hospital	82	65
Victoria, 1,445—Lunenburg		
Kendig Brothers Hospital	16	12
Virginia Beach, 846—Princess Anne		
Virginia Beach Infant Sanit.	50	45
Winchester, 6,883—Frederick		
Winchester Memorial Hospital	70	51
Total for community use, 56	3,701	2,335

In Virginia the following sixty counties have no hospitals for community use: Amelia, Amherst, Appomattox, Bath, Bedford, Bland, Botetourt, Brunswick, Buchanan, Buckingham, Carroll, Charles City, Charlotte, Clarke, Craig, Culpeper, Cumberland, Dickenson, Essex, Fairfax, Fauquier, Fluvanna, Franklin, Giles, Gloucester, Goochland, Grayson, Greene, Greensville, Highland, Isle of Wight, James City, King and Queen, King George, King William, Lancaster, Lee, Louisa, Madison, Mathews, Middlesex, Nelson, New Kent, Northumberland, Orange, Page, Powhatan, Prince Edward, Rappahannock, Richmond, Scott, Shenandoah, Smyth, Southampton, Stafford, Sussex, Warren, Westmoreland, Wythe, York.



VERMONT

● Hospital for community use.
✚ Tuberculosis Hospital.
▲ Nervous and Mental Hospital.
○ ✠ △ Established since 1920.

Total hospitals in Vermont, 39; for community use, 28; population per hospital bed, 224; percentage of beds occupied, 75; percentage of counties without hospitals, 28.5.

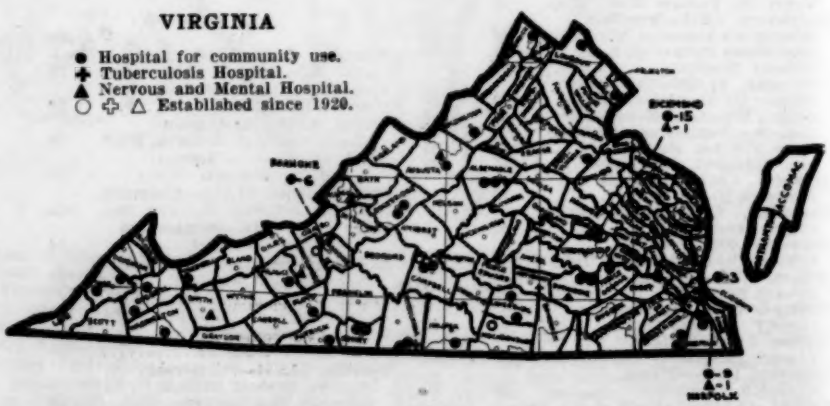
WASHINGTON

	Total Beds	Av. Beds in Use
Aberdeen, 16,174—Grays Harbor		
Aberdeen General Hospital	65	54
St. Joseph's Hospital	63	35
Anacortes, 5,284—Skagit		
Anacortes Hospital	12	5
Arlington, 2,028—Snohomish		
Arlington General Hospital	15	7
Auburn, 3,163—King		
Taylor-Lacey Hospital	50	37
Bellingham, 26,229—Whatcom		
Miss Smith's Private Hosp.	12	6
St. Joseph's Hospital	75	36
St. Luke's Hospital	42	37
Burlington, 1,360—Skagit		
Burlington General Hospital	46	20
Chehalis, 4,558—Lewis		
Chehalis General Hospital	15	7
St. Helen's Hospital	35	25
Clearlake, 153—Skagit		
Clearlake Hospital	20	10
Colfax, 3,027—Whitman		
St. Ignatius Hospital	50	40
College Place, —— —Walla Walla		
Walla Walla Sanitarium	50	18
Colville, 1,796—Stevens		
Mt. Carmel Hospital	23	12
Eatonville, 861—Pierce		
Eatonville General Hospital	25	14
Ellensburg, 3,810—Kittitas		
Ellensburg General Hospital	21	12
Elma, 1,253—Grays Harbor		
Elma General Hospital	20	14
Oakhurst Sanatorium (T.B.)	40	36
Everett, 29,303—Snohomish		
General Hospital	75	55
Providence Hospital	110	45
Hoquiam, 11,126—Grays Harbor		
Hoquiam General Hospital	67	38
Lake View, —— —Pierce		
Mountain View Sanat. (T.B.)	115	83
Leavenworth, 1,791—Chelan		
Cascade Sanitarium	15	11
McCleary, 180—Grays Harbor		
McCleary General Hospital	20	5
Monroe, 1,675—Snohomish		
Monroe General Hospital	15	7
Mt. Vernon, 3,341—Skagit		
Mt. Vernon General Hosp.	25	22
Newport, —— —Pend Oreille		
Newport Hospital	20	10
Olympia, 8,537—Thurston		
Maxwell Maternity Home	12	6
St. Peter's Hospital	125	90
Omak, 300—Okanogan		
Omak Hospital	10	6
Oroville, 1,013—Okanogan		
Oroville Hosp. & Sanit.	12	7
Pasco, 3,362—Franklin		
Our Lady of Lourdes Hospital	50	22
Port Angeles, 5,351—Clallam		
Port Angeles General Hospital	23	18
Resthaven Hospital	20	18
Pt. Orchard, 1,393—Kitsap		
Sunnyvale Hospital	25	14
Pt. Townsend, 2,847—Jefferson		
St. John's Hospital	95	40

	Total Beds	Av. Beds in Use
Stuart Circle Hospital	112	50
Tucker Sanatorium	50	35
Westbrook Sanatorium (N.& M.)	125	112
Roanoke, 58,208—Roanoke		
Burrell Memorial Hospital	39	20
Jefferson Hospital★	100	82
Lewis-Gale Hospital	54	37
Roanoke Hospital	120	31
Shenandoah Hospital	50	25
St. Charles Hospital	31	17
Salem, 4,159—Roanoke		
Mt. Regis Sanatorium (T.B.)	65	45
South Boston, 4,338—Halifax		
Halcyon Hospital	35	20
Staunton, 10,633—Augusta		
King's Daughters' Hospital	60	33
Stonega, 250—Wise		
Stonega Hospital	18	5
Stuart, 401—Patrick		
St. Martin's Hospital	40	10
Suffolk, 9,123—Nansemond		
Lake View Hospital	52	35
Virginia General Hospital	20	15
Toms Creek, 700—Wise		
Toms Creek Hospital	20	5
University, 1,000—Albemarle		
University of Virginia Hosp.★	260	225

VIRGINIA

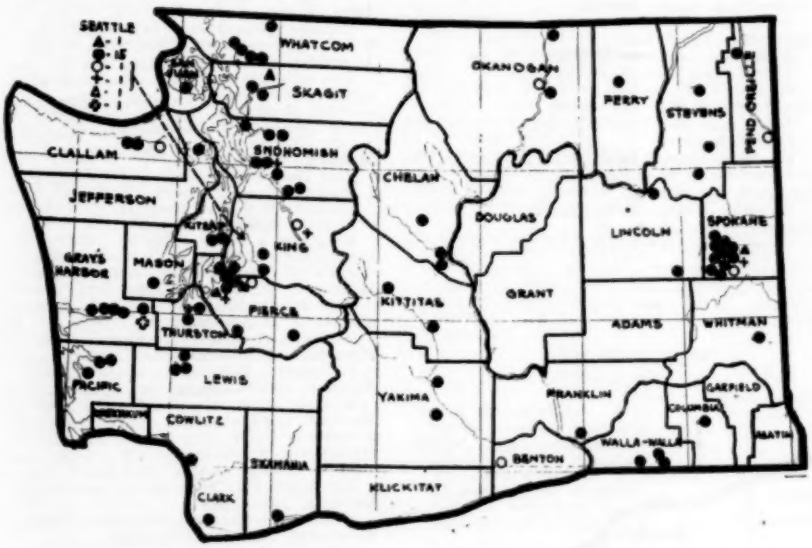
● Hospital for community use.
✚ Tuberculosis Hospital.
▲ Nervous and Mental Hospital.
○ ✠ △ Established since 1920.



Total hospitals in Virginia, 106; for community use, 56; population per hospital bed, 661; percentage of beds occupied, 63; percentage of counties without hospitals, 60.0.

	Total Beds	Av. Beds in Use
Puyallup, 6,323—Pierce		
Pudget Sound Sanat. (N.& M.)	25	18
Valley Hospital	30	15
Raymond, 4,260—Pacific		
Riverview Hospital	36	17
Renton, 3,301—King		
Renton Hospital	20	10
Republic, 781—Ferry		
Republic Hospital	12	4
Vancouver, 14,526—Clarke		
St. Joseph's Hospital	90	42
Walla Walla, 15,503—Walla Walla		
St. Mary's Hospital	100	80
Wenatchee, 6,324—Chelan		
Central Washington Deaconess Hospital	40	30
St. Anthony's Hospital	50	28

WASHINGTON



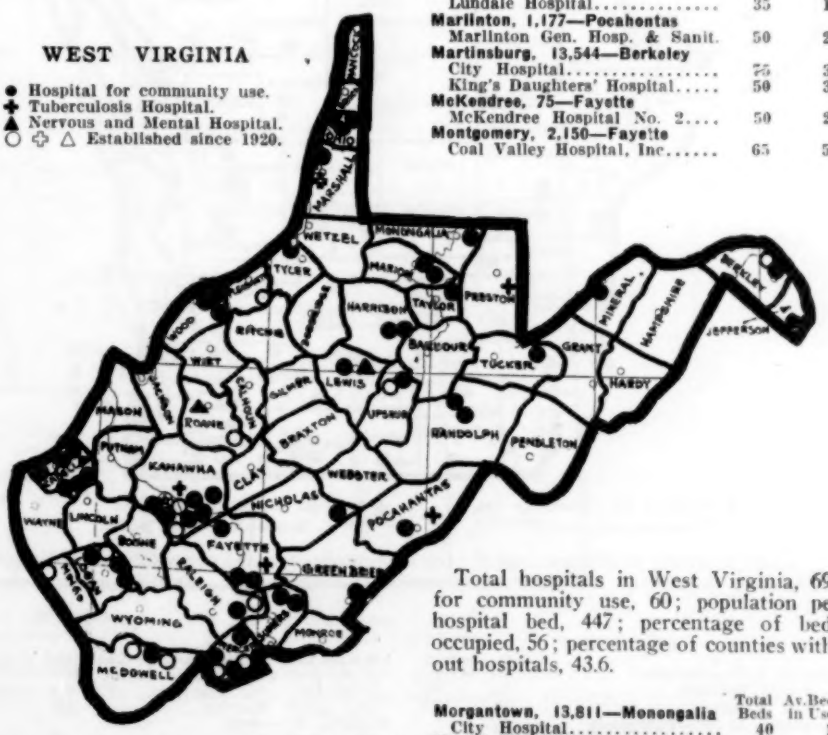
● Hospital for community use.
✚ Tuberculosis Hospital.
▲ Nervous and Mental Hospital.
○ ✣ △ Established since 1920.

Total hospitals in Washington, 135; for community use, 92; population per hospital bed, 253; percentage of beds occupied, 66; percentage of counties without hospitals, 20.5.

	Total Beds	Av. Beds in Use
Richmond Highlands, —— —King		
Firland Sanatorium (T.B.)	240	214
Roslyn, 2,673—Kittitas		
Roslyn Cle Elum Beneficial Co.	25	17
Seattle, 315,312—King		
Children's Orthopedic Hospital	128	87
Columbus Hospital	150	88
King County Hospital ★	220	188
Laurel Beach Sanatorium (T.B.)	50	45
Meadows Sanatorium (N.& M.)	40	27
Meridian Convalescent Sanit.	25	18
Minor Hospital	70	56
Norwegian Hospital	35	16
Providence Hospital	300	260
Riverton Sanatorium (T.B.)	60	40
Seattle City Hospital ★	125	102
Seattle General Hospital ★	110	90
St. Luke's Hospital	52	34
Swedish Hospital ★	122	100
Virginia Mason Hospital ★	100	72
Sequim, 250—Clallam		
Sequim Prairie Hospital	14	5
Shelton, 984—Mason		
Shelton General Hospital	36	25
Snohomish, 2,985—Snohomish		
Aldercrest Sanatorium (T.B.)	40	37
Snohomish General Hospital	15	5
Snoqualmie Falls, 362—King		
Snoqualmie Falls Hospital	50	25
South Bend, 3,023—Pacific		
South Bend General Hospital	35	12
Spokane, 108,897—Spokane		
Edgecliff Sanatorium (T.B.)	166	104
Maria Beard Deaconess Hosp.★	200	125
Park Hill Hospital	15	8
Payne Private Sanat. (N.& M.)	10	5
Rivercrest Hospital	100	30
Sacred Heart Hospital	311	220
Spokane City Emergency Hosp.	10	6
St. Luke's Hospital ★	170	120
Sprague, —— —Lincoln		
Sprague Hospital	10	4
Sultan, 576—Snohomish		
The Sultan Hospital	15	8
Sumas, 854—Whatcom		
Sumas General Hospital	10	3
Tacoma, 104,455—Pierce		
Northern Pacific Beneficial Ass'n. Hospital ★	131	66
Pierce County Hospital	120	36
St. Joseph's Hospital	200	150
Tacoma General Hospital ★	210	120
Toppenish, 3,120—Yakima		
Toppenish Hospital	25	25
Valley, 400—Stevens		
Cartwright Sanitarium	18	9

WEST VIRGINIA

● Hospital for community use.
✚ Tuberculosis Hospital.
▲ Nervous and Mental Hospital.
○ ✣ △ Established since 1920.



	Total Beds	Av. Beds in Use
Yakima, 22,664—Yakima		
St. Elizabeth's Hospital	122	100
Five General Hospitals of less than 10 beds	40	19
Total for community use, 92	5,841	3,887

In Washington the following eight counties have no hospitals for community use: Adams, Asotin, Douglas, Garfield, Grant, Jefferson, Klickitat, Wahkiakum.

WEST VIRGINIA	Total Beds	Av. Beds in Use
Beckley, 2,161—Raleigh		
Beckley Hospital	75	37
Kings Daughters' General Hosp.	70	19
Bluefield, 19,347—Mercer		
Bluefield Sanitarium	85	43
St. Luke's Hospital	75	42
Buckhannon, 3,785—Upshur		
Buckhannon Hospital	30	15
St. Joseph's Hospital	30	15
Charleston, 49,019—Kanawha		
Charleston General Hospital ★	200	110
Hill Crest Sanatorium (T.B.)	30	24
Kanawha Valley Hosp. & Sanit.	70	35
Dr. Lewis Prichard Free Clinical Hospital	32	20
McMillan Hospital	50	24
Mountain State Hospital	112	54
St. Francis Hospital	100	25
Staats Hospital	22	16
Charles Town, 2,527—Jefferson		
Charles Town General Hospital	25	14
Clarksburg, 30,402—Harrison		
Mason Hospital	40	25
St. Mary's Hospital	125	76
Davis, 2,491—Tucker		
Allegheny Heights Hospital	35	20
Elkins, 6,788—Randolph		
Davis Memorial Hospital	50	25
Elkins City Hospital	38	25
Fairmont, 20,959—Marion		
Cook Hospital	73	50
Fairmont Hospital No. 3	85	46
Glen Dale, 213—Marshall		
Reynolds Memorial Hospital	65	35
Grafton, 8,517—Taylor		
Grafton City Hospital	20	18
Hinton, 3,656—Summers		
Hinton Hospital	75	30
Huntington, 63,485—Cabell		
Barnett Hospital	40	22
Chesapeake & Ohio Ry. Hosp.	70	54
Guthrie Hospital	55	38
Hawes-Marple Hospital	22	5
Huntington Children's Hospital	55	52
Huntington E. E. & T. Hospital	10	4
Kessler-Hatfield Hospital	92	77
Steenberger Women's Hospital	10	6
Keyser, 6,003—Mineral		
Hoffman Hospital	25	17
Kimball, 1,045—McDowell		
Harrison Memorial Hospital	25	20
Logan, 2,998—Logan		
Logan Hospital	100	28
Lundale, 525—Logan		
Lundale Hospital	35	15
Marlinton, 1,177—Pocahontas		
Marlinton Gen. Hosp. & Sanit.	50	24
Martinsburg, 13,544—Berkeley		
City Hospital	75	30
King's Daughters' Hospital	50	30
McKendree, 75—Fayette		
McKendree Hospital No. 2	50	23
Montgomery, 2,150—Fayette		
Coal Valley Hospital, Inc.	65	52

Total hospitals in West Virginia, 69; for community use, 60; population per hospital bed, 447; percentage of beds occupied, 56; percentage of counties without hospitals, 43.6.

	Total Beds	Av. Beds in Use
Morgantown, 13,811—Monongalia		
City Hospital	40	18
Moundsville, 11,660—Marshall		
Grand View Sanatorium (T.B.)	10	8
Oak Hill, 764—Fayette		
Oak Hill Hospital	50	18
Parkersburg, 21,299—Wood		
Camden Clark Mem. Hospital	75	38
St. Joseph's Hospital	100	42
Princeton, 6,224—Mercer		
Memorial Hospital	50	25
Princeton Hospital	40	20
Richwood, 4,331—Nicholas		
McClung Hospital	50	30

	Total Beds	Av. Beds in Use
Ronceverte, 2,319—Greenbrier		
Dr. Love's Private Hospital	50	34
Sistersville, 3,238—Tyler		
Sistersville General Hospital	10	4
South Charleston, 3,650—Kanawha		
Dunn Hospital	25	10
Spencer, 1,765—Roane		
City Hospital	25	16
Welch, 3,232—McDowell		
Grace Hospital	38	29
Welch Hospital No. 1	115	57
Wheeling, 56,208—Ohio		
Ohio Valley General Hosp.★	173	159
Wheeling Hospital ★	225	150
Williamson, 6,819—Mingo		
Williamson Hospital	55	30
One General Hospital of less than 10 beds	8	1
Total for community use, 60	3,580	2,029

In West Virginia the following twenty-four counties have no hospitals for community use: Barbour, Boone, Braxton, Brooke, Clay, Doddridge, Gilmer, Grant, Hampshire, Hancock, Hardy, Jackson, Lincoln, Mason, Monroe, Pendleton, Preston, Putnam, Ritchie, Wayne, Webster, Wetzel, Wirt, Wyoming.

Total hospitals in Wisconsin, 226; for community use, 153; population per hospital bed, 224; percentage of beds occupied, 74; percentage of counties without hospitals, 15.4.

WISCONSIN

	Total Beds	Av. Beds in Use
Antigo, 8,451—Langlade		
Antigo Hospital	20	12
City Hospital	25	15
Appleton, 21,140—Outagamie		
St. Elizabeth's Hospital ★	200	125
Ashland, 11,334—Ashland		
Ashland General Hospital	67	39
St. Joseph's Hospital ★	150	98
Baraboo, 5,538—Sauk		
St. Mary's Ringling Hospital	24	8
Barron, 1,623—Barron		
Barron City Hospital	22	15
River Side Hospital	15	7
Beaver Dam, 7,992—Dodge		
Lutheran Deaconess Hospital	24	18
Beloit, 24,771—Rock		
Beloit General Hospital	18	8
Beloit Hospital	24	11
Dr. Newman's Sanitarium	17	6
H. P. Strong Emergency Hosp.	20	8
Boscobel, 1,670—Grant		
Brookside Hospital	14	8
Parker Hospital	14	5
Chippewa Falls, 9,130—Chippewa		
St. Joseph's Hospital	180	150
Columbus, 2,460—Columbia		
St. Mary's Hospital	24	15
Cumberland, 1,528—Barron		
Island City Hospital	20	16
Dodgeville, 1,791—Iowa		
Dodgeville Lutheran Hospital	20	9
Iowa County Insane Asylum	140	110
St. Joseph's Hospital	50	25
Eau Claire, 22,375—Eau Claire		
Eau Claire Co. Insane Asylum	191	185
Luther Hospital	115	70
Mt. Washington Sanat. (T.B.)	55	55
Sacred Heart Hospital	169	100
Edgerton, 2,688—Rock		
Edgerton Memorial Hospital	20	8
Elkhorn, 1,991—Walworth		
Walworth Co. Hospital	16	9
Fond du Lac, 26,040—Fond du Lac		
Fond du Lac County Insane Asylum	250	240
St. Agnes' Hospital	230	117
Frederic, 511—Polk		
Frederic Hospital	14	9
Green Bay, 34,290—Brown		
Bellin Memorial Hospital	65	52
Brown Co. Insane Asylum	140	136
St. Mary's Hospital	100	50
St. Vincent's Hospital	200	120
Hartford, 4,515—Washington		
Hartford General Hospital	20	4
Hudson, 3,014—St. Croix		
Hudson Sanatorium	60	35
Janesville, 20,785—Rock		
Mercy Hospital	150	75
Jefferson, 2,572—Jefferson		
Forest Lawn Sanatorium (T.B.)	50	50
Kenosha, 50,891—Kenosha		
Kenosha Hospital	75	53
St. Catherine's Hosp. & Sanit.	50	35
Willowbrook Sanatorium (T.B.)	36	32
La Crosse, 30,421—La Crosse		
Grandview Hospital	86	71
La Crosse Hospital Association	40	30
La Crosse Lutheran Hospital ★	110	72
St. Francis Hospital ★	200	155
Ladysmith, 3,581—Rusk		
St. Mary's Hospital	35	21
Lake Geneva, 2,632—Walworth		
Cottage-by-the-Shore	10	5
Lake Geneva Sanit. (N.& M.)	50	25
Lancaster, 2,485—Grant		
Drs. Doolittle Hospital	15	8
Laona, 700—Forest		
Ovitz Hospital	18	10
Little Chute, 2,017—Outagamie		
Riverview Sanatorium (T.B.)	34	32
Madison, 46,385—Dane		
East Washington Hospital	50	15
Madison General Hospital ★	120	96
Madison Methodist Hospital	50	35
Madison Sanit. & Hospital	50	22
Morningside Sanat. (T.B.)	30	19
St. Mary's Hospital ★	100	75
State of Wisconsin Gen. Hosp.★	400	225
Manitowoc, 22,132—Manitowoc		
Holy Family Hospital	80	70
Marinette, 13,610—Marinette		
Marinette & Menominee Hosp.	60	32
Marshfield, 7,394—Wood		
St. Joseph's Hospital ★	130	110
Mauston, 1,966—Juneau		
Mauston Hospital	40	20
Medford, 1,881—Taylor		
Medford Clinic Hospital	13	9
Menomonie, 5,104—Dunn		
Dunn County Asylum (N.& M.)	117	111
Menomonie City Hospital	20	12
Mendota, 100—Dane		
Wisconsin Mem. Hosp. (N.& M.)	260	240
Milwaukee, 500,192—Milwaukee		
Columbia Hospital ★	110	73
Evangelical Deaconess Hosp.★	118	74
Hanover General Hospital	52	39
Johnston Emergency Hospital	35	15
Lincoln Hosp. (Rosenheimer's)	14	12
Marquette University Hospital ★	155	102
Milwaukee Children's Hospital †	135	120
Milwaukee Hosp. "The Passavant" ★	135	120
Milwaukee Infant's Hospital	50	30
Milwaukee Maternity & General Hospital	60	31
Milwaukee North Side Sanit.	14	2
Misericordia Hospital †	75	50
Mt. Sinai Hospital ★	125	120
Ogden Hospital	20	10
The Riverside Sanitarium	50	45
Roosevelt General Hospital	35	20
Sacred Heart Sanitarium	300	150
South Side Hospital	30	15
South View Hospital †	100	60
St. Joseph's Hospital ★	140	90
St. Mary's Hill Sanit. (N.& M.)	112	103
St. Mary's Hospital ★	190	143
St. Vincent's Infant Asylum & Maternity Hospital	125	125
Mondovi, 1,554—Buffalo		
Mondovi Hospital	12	7
Monroe, 4,788—Green		
Evangelical Deaconess Hospital.	35	17
Neenah, 7,171—Winnebago		
Theda Clark Memorial Hospital	52	35
Niagara, 1,946—Marinette		
Niagara Hospital	12	5
Oconomowoc, 3,301—Waukesha		
Oconomowoc Health Resort (N.& M.)	70	60
Oconomowoc Sanit. (N.& M.)	14	10
Summit Hospital	60	32
Oconto, 4,920—Oconto		
Oconto County & City Hosp.	20	12
Onalaska, 1,066—La Crosse		
Oak Forest Sanatorium (T.B.)	60	56
Oshkosh, 33,217—Winnebago		
Alexian Brothers Hospital (N.& M.)	65	55
St. Mary's and Mercy Hosp.★	150	77
Park Falls, 2,676—Price		
Park Falls Hospital	30	15
Pewaukee, 800—Waukesha		
Oak Sanatorium (T.B.)	40	39
Platteville, 4,353—Grant		
Buck Hospital	10	5
Wilson Cunningham Hospital	20	15
Plymouth, 3,415—Sheboygan		
Plymouth Hospital	21	15
Portage, 5,582—Columbia		
St. Saviors General Hospital	40	40
Prairie du Chien, 3,537—Crawford		
Old Sanitarium & Hotel	10	8
Prairie du Chien Sanit. & Hosp.	70	24
Pureair, (Bayfield P.O.), ——Bayfield		
Pureair Sanatorium (T.B.)	70	65
Racine, 67,707—Racine		
St. Luke's Hospital	60	45
St. Mary's Hospital	80	70
Sunny Rest Sanatorium (T.B.)	49	46

	Total Beds	Av. Beds in Use
Rhinelander, 6,654—Oneida		
St. Mary's Hospital	65	30
Rice Lake, 4,457—Barron		
Lakeside Methodist Hospital	33	18
Richland Center, 3,409—Richland		
Richland Hospital	25	12
Sheboygan, 33,535—Sheboygan		
St. Nicholas Hospital	100	84
Shullsburg, 1,158—Lafayette		
Dr. Ennis' Hospital	15	7
South Milwaukee, 7,598—Milwaukee		
South Milwaukee Hospital	16	6
Sparta, 4,466—Monroe		
St. Mary's Hospital	75	40
Stanley, 2,577—Chippewa		
Victory Hospital	12	7
Stevens Point, 12,889—Portage		
River Pines Sanatorium (T.B.)	50	40
St. Michael's Hospital	30	20
Stoughton, 5,101—Dane		
Stoughton Hospital Ass'n	16	8
Sturgeon Bay, 4,553—Door		
Egeland Hospital	20	15
Physicians and Surgeons Hosp.	15	10
Superior, 39,671—Douglas		
St. Francis Hospital	55	25
St. Mary's Hospital ★	110	76
Tomahawk, 2,801—Lincoln		
Sacred Heart Hospital	50	12
Washburn, 3,707—Bayfield		
Washburn Hospital	14	4
Watertown, 9,299—Jefferson		
St. Mary's Hospital	50	30
Waukesha, 14,720—Waukesha		
Waukesha Municipal Hospital	23	18
Waukesha Springs Sanitarium (N.& M.)	50	40
Wausau, 20,101—Marathon		
"Mount View" Marathon Co. Tuberculosis Sanatorium	50	45
St. Mary's Hospital	118	80
Wausau Memorial Hospital	52	40
Wauwatosa, 5,818—Milwaukee		
Blue Mound Sanatorium (T.B.)	100	70
Milwaukee Co. Asylum for Chronic Insane	890	876
Milwaukee County Hospital ★	308	298
Milwaukee Hospital for Insane	888	824
Milwaukee Sanitarium (N.&M.)	98	94
Muirdale Sanatorium (T.B.)	350	326
West Bend, 3,378—Washington		
Dr. Lynch's Sanatorium	11	11
West DePere, —— —Brown		
Hickory Grove Sanatorium (T.B.)	40	39
Whitehall, 851—Trempealeau		
Whitehall Community Hospital	40	25
Whitelaw, —— —Manitowoc		
Maple Crest Sanitarium (T.B.)	39	34
Winnebago, 57—Winnebago		
Sunny View Sanatorium (T.B.)	65	60
Wisconsin Rapids, 6,521—Wood		
Riverview Hospital	30	25
Wittenberg, 854—Shawano		
Wittenberg Hospital Ass'n	15	12
Five General Hospitals of less than 10 beds	33	15
Total for community use, 153	12,492	9,341

In Wisconsin the following eleven counties have no hospitals for community use: Adams, Clark, Florence, Green Lake, Iron, Jackson, Kewaunee, Marquette, Vilas, Washburn, Waushara.

WYOMING

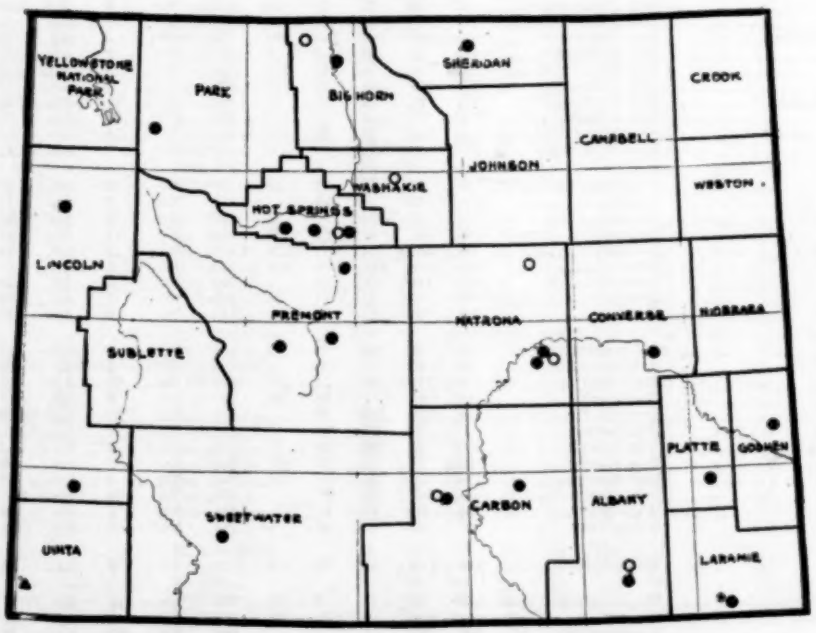
	Total Beds	Av. Beds in Use
Basin, 763—Bighorn		
Basin Hospital Company	15	4
Casper, 11,447—Natrona		
Casper Private Hospital	75	45
Dr. Keith's Private Hospital	10	6
Lincoln Street Hospital	20	12
Natrona Memorial Hospital	90	60
Women's and Children's Hospital	20	15
Cheyenne, 13,829—Laramie		
Laramie Co. Isolation Hospital	12	1
Laramie Co. Memorial Hospital	150	75
Douglas, 2,775—Converse		
Douglas Hospital	17	9
Gebo, 75—Hot Springs		
Gebo Hospital	20	12
Grass Creek, —— —Hot Springs		
Ohio Grass Creek Hospital	10	3
Hanna, 2,000—Carbon		
Hanna Hospital	10	6
Kemmerer, 1,517—Lincoln		
Lincoln Co. Miners Hospital	40	23
Lander, 2,133—Fremont		
Bishop Randall Hospital	20	10
Laramie, 6,301—Albany		
Ivinson Memorial Hospital	44	20
Powell, 2,463—Park		
Whitlock Hospital	16	6
Sheridan, 9,175—Sheridan		
Sheridan Co. Memorial Hospital	53	25
Shoshoni, 561—Fremont		
Dr. Jewell's Hospital	11	3
Thermopolis, 2,095—Hot Springs		
Hopewell Hospital	35	25
McGannon Sanitarium	20	12
Wheatland, 1,356—Platte		
Wheatland General Hospital	60	40
Three General Hospitals of less than 10 beds	19	17
Total for community use, 24	767	429

In Wyoming the following seven counties have no hospitals for community use: Campbell, Crook, Johnson, Niobrara, Sublette, Uinta, Weston.

GRAND TOTALS

One hundred and eighty-nine General Hospitals of less than 10 beds	1,330	636
For community use, 4,967	388,890	269,494

WYOMING



● Hospital for community use. ▲ Nervous and Mental Hospital.
✚ Tuberculosis Hospital. ○ ✣ △ Established since 1920.

Total hospitals in Wyoming, 37; for community use, 24; population per hospital bed, 289; percentage of beds occupied, 55; percentage of counties without hospitals, 31.8.

HOSPITALS APPROVED FOR INTERNSHIPS

By the Council on Medical Education and Hospitals of the American Medical Association, 535 North Dearborn Street, Chicago

Revised to April 3, 1926

The following general hospitals containing 149,221 beds are considered in position to furnish acceptable internships for medical graduates. For approved graduate medical schools, also hospitals providing approved residencies in certain specialties, send 10 cents for list.

HOSPITALS, 553; INTERNSHIPS, 4,724

Name of Hospital	Location	Number of Beds						Internships					
		Surgical	Medical	Obstetric	Pediatric	Other	Total	Affiliated—For What Service	Number	By Examination or Appointment	Length of Service in Months	Begin	Salary per Month	Dispensary Service
ALABAMA														
Hillman Hospital	Birmingham	40	34	20	20	46	160	No	12	Ap.	12	July	$25 (a)	Req.
Employees' Hospital of the Tennessee Coal, Iron & R. R. Co.	Fairfield	104	100	20	48	38	310	No	10	Ap.	12	July	$50	Req.
John A. Andrew Memorial Hospital (col)	Tuskegee Institute	22	40	8	5	..	75	No	3	Ap.	12	June & July	$ 6	Req.
ARKANSAS														
St. Vincent's Infirmary	Little Rock	yes	yes	yes	yes	yes	150	No	1	Ap.	12	July	$75	Req.
CALIFORNIA														
General Hospital of Fresno County	Fresno	55	129(3)	25	20	71	300	No	8	Ap.	12	July	$25	Req.
Loma Linda Sanitarium and Hospital [1]	Loma Linda	20	110	20	5	..	155	No	2	Ap.	12	July	$75	Op.
Seaside Hospital	Long Beach	68	30	47	5	28	178	No	5	Ap.	12	July & Oct.	$30	Req.
California Lutheran Hospital [1]	Los Angeles	yes	yes	90	40	270	400	No	12	Ap.	12	July	$25	Req.
Hollywood Hospital	Los Angeles	91	10	32	4	2	139	No	1	Ap	12	July	$50	None
Los Angeles General Hospital [1]	Los Angeles	410	768	75	30	..	1,283	No	55	Ex.	*	(ee)	$20	Op.
Methodist Hospital of Southern California [1]	Los Angeles	75	75	60	75	..	285	No	3	Ap.	12	Aug.	$50	Req.
St. Vincent's Hospital [1]	Los Angeles	35	35	30	..	..	100	No	2	Ap.	12	July	$50	None
White Memorial Hospital [1]	Los Angeles	41	40	19	8	25	133	(4)	12	Ap.	12	July	$10	Req.
Fabiola Hospital [1]	Oakland	64	25	48	25	55	210	No	2	Ap.	12	July	$50	Req.
Providence Hospital	Oakland	yes	yes	yes	yes	yes	250	No	1	....	..	.....	...	.....
The Samuel Merritt Hospital [1]	Oakland	70	21	20	7	..	118	No	2	Ap.	12	Jan.	$25	None
San Bernardino County Hospital	San Bernardino	38	40	10	10	122	220	No	4	Ap.	12	July	$30	Req.
San Diego County General Hospital	San Diego	61	115	16	33	50	275	No	7	Ap.	12	July	(b)	Req.
Franklin Hospital	San Francisco	yes	yes	yes	..	yes	206	No	6	Ap.	12	July	$30	Req.
French Hospital [1]	San Francisco	60	75	16	16	58	225	No	4	Ap.	12	July	$50	Req.
Hahnemann Hospital of the Univ. of Calif.	San Francisco	yes	yes	yes	yes	yes	112	(6)	3	Ap.	12	June	No	Op.
Hospital for Children [2]	San Francisco	75	50	35	100	15	275	(7)	12	Ap.	12	July	$10	Req.
Lane and Stanford University Hospitals [1]	San Francisco	yes	yes	yes	yes	yes	339	(8)	(e)	Ap.	12	(d)	(e)	Req.
Letterman General Hospital	San Francisco	440	501	15	20	..	976	(9)	15	Ap.	12	July	(f)	Req.
Mary's Help Hospital	San Francisco	yes	yes	30	12	122	164	No	2	Ap.	12	July	$50	Req.
Mt. Zion Hospital [1]	San Francisco	53	58	27	15	20	173	No	6	Ap	12	June	$10	Req.
San Francisco Hospital [1]	San Francisco	yes	yes	33	34	1,005	1,072	No	31	Ap.	12	June & July	$10	None
Southern Pacific General Hospital	San Francisco	yes	yes	yes	yes	yes	250	(10)	6	Ap.	12	July	$30	Req.
St. Joseph's Hospital	San Francisco	110	53	23	9	5	200	No	3	Ap.	12	Jan. & June	$50	None
St. Luke's Hospital [1]	San Francisco	yes	yes	18	15	170	203	No	8	Ap.	12	July	$15 (g)	Req.
St. Mary's Hospital [1]	San Francisco	yes	yes	yes	20	190	210	No	4	Ap.	12	June & July	$25	Op.
University of California Hospital [1]	San Francisco	82	54	54	68	25	283	No	14	Ap.	12	June	No	Req.
Alameda County Hospital [1]	San Leandro	52	104	8	..	199	363	(11)	20	Ap.	12	July & Aug.	$25	None
Santa Barbara Cottage Hospital	Santa Barbara	yes	yes	18	18	104	140	No	4	Ap.	12	July	$20	Req.
St. Francis Hospital	Santa Barbara	22	18	12	10	6	68§	No	1	Ap.	12	July	$25 (h)	Req.
COLORADO														
St. Francis Hospital	Colorado Springs	60	50	16	12	12	150	No	2	Ap.	12	June	$25	Op.
Children's Hospital [1]	Denver	75	25	..	35	..	135	No	3	Ap.	12	Jan. & July	(1-u)	Req.
Colorado General Hospital [1]	Denver	50	50	30	30	10	170	No	6	Ap.	12	July	$25	Req.
Denver General Hospital [1]	Denver	95	35	35	20	125	310	No	11	Ap.	18	Jan. & July	$30	Req.
Fitzsimons General Hospital	Denver	174	385	4	..	1,294	1,857	(12)	13	Ap.	12	July	(f)	None
Mercy Hospital	Denver	yes	yes	yes	yes	yes	160	No	3	Ap.	12	July	$25	None
St. Anthony's Hospital [1]	Denver	130	130	25	15	..	300	No	3	Ap.	12	July	$10	None
St. Joseph's Hospital	Denver	82	45	30	44	24	225	No	2	Ap.	12	June	$25	None
St. Luke's Hospital [1]	Denver	100	60	20	25	20	225	No	9	Ap.	12	Jan. & July	$15	Req.
CONNECTICUT														
Bridgeport Hospital	Bridgeport	51	51	99	29	59	289	(13)	6	Ap.	12	July	No	Req.
St. Vincent's Hospital	Bridgeport	120	40	35	30	..	225	(13)	4	Ap.	12	July	$20	Op.
Hartford Hospital	Hartford	114	114	62	71	257	618	No	11	Ap.	22	**	No	None
Municipal Hospital	Hartford	30	30	4	10	36	110	No	2	Ap.	12	July	$50	Op.
St. Francis Hospital	Hartford	180	180	110	30	..	500	(14)	10	Ap.	12-24	July	No	None
Middlesex Hospital	Middletown	50	32	50	18	..	150	No	2	Ap.	12	July	$35 (h)	None
New Britain General Hospital	New Britain	100	51	33	14	33	231	No	4	Ap.	12-15	July & Oct.	$30	None
Grace Hospital [1]	New Haven	38	33	12	25	142	250	No	7	Ap.	18	July	$25	None
Hospital of St. Raphael	New Haven	116	33	20	21	20	210	No	4	Ex.	12	July	$25	None
New Haven Hospital [1]	New Haven	141	107	60	98	..	410	No	26	Ap.	12-16	***	No	Req.
St. Mary's Hospital	Waterbury	85	80	45	14	..	224	No	4	Ap.	12	July	$25	None
Waterbury Hospital	Waterbury	60	60	29	29	7	185	No	6	Ap.	12	July	$25	Req.
DELAWARE														
Delaware Hospital	Wilmington	yes	yes	24	35	141	200	No	3	Ap.	12	July	$50	Req.
DISTRICT OF COLUMBIA														
Central Disp. and Emergency Hospital	Washington	100	40	..	8	12	160	No	11	Ap.	12	July	$10	Req.
Columbia Hospital for Women	Washington	yes	yes	63	yes	56	119	No	4	Ap.	12	July	No	Req.
Freedmen's Hospital [1]	Washington	106	55	27	20	..	208	No	20	Ex.	12	July & Oct.	No	Req.
Gallinger Municipal Hospital [1]	Washington	45	84	20	10	206	365	No	8	Ap.	12	July	No	Req.
Garfield Memorial Hospital [1]	Washington	84	70	41	..	133	328	No	8	Ap.	12	July	$10	Req.
Georgetown University Hospital	Washington	81	47	51	16	40	235	No	5	Both	12	July	No	Req.
George Washington University Hospital	Washington	yes	yes	yes	yes	yes	100	No	6	Ap.	12	June	$10	None
Providence Hospital	Washington	127	90	33	50	10	310	No	7	Ap.	12	July	$10	Req.
Sibley Memorial Hospital	Washington	yes	yes	28	46	80	154	No	2	Ap.	12	July	(j)	Req.
St. Elizabeth's Hospital [1]	Washington	50	150	..	..	85	285	(15)	3	Ex.	12	Jan. & July	(j)	Req.
Walter Reed General Hospital	Washington	615	605	20	yes	..	1,240	No	14	Ap.	12	July	(f)	None
Washington Sanitarium and Hospital, Takoma Park [1]	Washington	50	135	9	6	..	200	No	2	Ap.	12	Aug.	$100	Op.
FLORIDA														
Duval County Hospital	Jacksonville	60	40	16	24	60	200	No	4	Ap.	12	July	$50	Req.
St. Luke's Hospital	Jacksonville	yes	yes	yes	yes	yes	100	No	2	Ap.	12	July	$50	Req.
GEORGIA														
Davis Fischer Sanatorium	Atlanta	yes	yes	yes	yes	yes	160	No	3	Ap.	12	Jan.	$100	None
Georgia Baptist Hospital	Atlanta	yes	yes	yes	yes	yes	115	No	6	Ap.	12	June	$35 (k)	None

Numerical and other references will be found on pages 1062 and 1063.

Name of Hospital	Location	Number of Beds						Affiliated—For What Service	Internships					Dispensary Service
		Surgical	Medical	Obstetric	Pediatric	Other	Total		Number	By Examination or Appointment	Length of Service in Months	Begin	Salary per Month	
GEORGIA—Continued														
Grady Hospital	Atlanta	100	100	100	100	25	425	No	24	Ap.	18-24	July	$15	Req.
Piedmont Hospital	Atlanta	50	50	10	..	..	128	No	4	Ap.	12	July	$50	None
St. Joseph's Infirmary	Atlanta	60	45	20	..	..	125	(16)	3	Ap.	12	June	(l)	Req.
University Hospital [1]	Augusta	118	100	36	17	..	271	No	8	Ap.	12	July	No	Req.
Wesley Memorial Hospital	Emory University	yes	yes	yes	yes	yes	300	No	7	Ex.	12	July	$25	Req.
Macon Hospital	Macon	60	40	20	20	..	140	No	4	Ap.	12	July	$40	Req.
IDAHO														
St Alphonsus Hospital [1]	Boise	yes	yes	yes	yes	yes	120	No	1	....	..	.....	$00	.....
ILLINOIS														
Alexian Brothers' Hospital (male patients only)	Chicago	100	90	..	10	80	280	No	6	Ap.	12	July	No	Req.
Augustana Hospital	Chicago	119	60	16	18	33	246	(17)	10	Ap.	24	Jan. & July	No	Req.
Cook County Hospital [1]	Chicago	550	500	150	150	1,150	2,500	No	70	Ex.	18	Jan. & July	No	None
Englewood Hospital	Chicago	yes	yes	yes	yes	yes	150	No	4	Ap.	12	July	No	None
Frances E. Willard Hospital [1]	Chicago	50	30	23	yes	22	125	No	5	Ap.	12	July	No	Req.
German Evangelical Deaconess Hospital	Chicago	40	40	38	15	17	150	No	4	Ap.	12	June	$15	None
Grant Hospital	Chicago	yes	yes	yes	yes	yes	200	No	8	Ap.	12	July	No	Req.
Hospital of St. Anthony de Padua	Chicago	122	20	35	12	1	190	(18)	6	Ap.	18	†	No	None
Illinois Central Hospital	Chicago	80	60	25	yes	35	200	No	7	Ap.	18	Jan. & July	$25	Req.
John B. Murphy Hospital	Chicago	40	23	37	..	..	100	No	4	Ap.	12	July	(m)	Req.
Lutheran Deaconess Home and Hospital	Chicago	80	50	40	20	10	200	No	7	Ap.	12	††	No	Req.
Lutheran Memorial Hospital	Chicago	80	40	35	18	19	192	No	6	Ap.	12	Jan. & July	No	None
Mercy Hospital	Chicago	200	100	50	30	20	400	(19)	19	Ap.	18	June & Dec.	No	Op.
Michael Reese Hospital [1]	Chicago	yes	yes	yes	yes	yes	474	(20)	31	Ap.	24	Jan. & July	No	Op.
Mount Sinai Hospital [1]	Chicago	30	35	20	10	5	100	No	4	Ap.	12	July	$25	Req.
Norwegian-American Hospital	Chicago	75	40	40	10	..	165	No	7	Ap.	12	†	$50	Req.
Presbyterian Hospital [1]	Chicago	200	175	50	50	..	475	No	25	Ap.	12	Jan. & July	No	Req.
Provident Hospital (col.)	Chicago	yes	yes	5	8	..	65	No	4	Ap.	12	†††	No	Req.
Ravenswood Hospital [1]	Chicago	yes	yes	yes	yes	yes	177	No	5	Ap.	12	†	$25	None
Research and Educational Hospital of University of Illinois [1]	Chicago	40	50	25	20	65	200	No	10	Ex.	12	Jan. & July	No	Op.
South Shore Hospital	Chicago	60	30	25	10	..	125	No	4	Ap.	12	July	No	Op.
St. Anne's Hospital [1]	Chicago	29	12	55	10	19	125	No	4	Ap.	12	Jan. & July	No	None
St. Bernard's Hospital	Chicago	90	30	50	15	15	200	No	8	Ap.	12	July	No	Req.
St. Elizabeth Hospital	Chicago	100	50	30	15	30	225	No	6	Ap.	12	July	No	Req.
St. Joseph's Hospital	Chicago	50	40	20	30	35	175	No	8	Ap.	12	Apr. & July	No	Req.
St. Luke's Hospital	Chicago	yes	yes	yes	yes	yes	770	No	40	Ex.	24	June	No	Req.
St. Mary of Nazareth Hospital	Chicago	yes	yes	36	16	198	250	No	8	Ap.	12	July	No	Req.
Swedish Covenant Hospital	Chicago	50	30	35	35	..	150	No	4	Ap.	12	Jan. & July	$30	None
U. S. Marine Hospital No. 5	Chicago	38	63	..	..	26	127	(21)	2	Ap.	12	July	$75	Req.
University Hospital	Chicago	yes	yes	yes	yes	yes	161	No	4	Ap.	12	July	No	Req.
Washington Boulevard Hospital	Chicago	45	45	10	..	..	100	No	6	Ap.	18	Jan. & July	No	Req.
Washington Park Hospital	Chicago	50	25	50	10	15	150	No	6	Ap.	12	July	No	None
Wesley Memorial Hospital	Chicago	100	75	25	25	50	275	No	17	Ap.	24	†	No	Req.
West Side Hospital	Chicago	105	38	38	4	..	185	No	8	Ap.	18	††††	No	None
Women and Children's Hospital [1]	Chicago	yes	yes	26	14	60	100	No	4	Ap.	12	June & July	No	Req.
Lake View Hospital [1]	Danville	65	21	13	13	13	125	No	4	Ap.	12	.....	$25-$50	Op.
Decatur and Macon County Hospital	Decatur	49	49	22	8	22	150	(22)	4	Ap.	12	July	$25	Req.
Evanston Hospital [1]	Evanston	74	28	58	42	45	247	No	9	Ap.	18	Jan. & July	No	Req.
St. Francis Hospital [1]	Evanston	100	40	40	20	..	200	No	6	Ap.	12	‡	No	Op.
Oak Park Hospital	Oak Park	44	35	31	25	40	175	No	5	Ap.	12	July	$10	None
West Suburban Hospital	Oak Park	100	50	65	35	..	250	No	10	Ap.	12	##	No	None
St. Francis Hospital	Peoria	75	75	30	40	30	250	No	4	Ap.	12	July	$25	Req.
INDIANA														
Ft. Wayne Lutheran Hospital	Ft. Wayne	yes	yes	18	8	99	125	No	2	Ap.	12	July	$25	Req.
St. Joseph's Hospital	Ft. Wayne	100	70	30	20	..	220	No	5	Ap.	12	July	$25 (n)	Req.
St. Mary's Mercy Hospital [1]	Gary	yes	yes	yes	yes	yes	150	No	4	Ap.	12	July	$25 (a)	None
St. Margaret's Hospital [1]	Hammond	100	50	25	15	5	195	No	5	Ap.	12	###	$45	None
Indianapolis City Hospital	Indianapolis	120	120	30	81	225	576	No	25	Ex.	20	¶	$12.50	Req.
Methodist Episcopal Hospital	Indianapolis	yes	yes	yes	yes	yes	375	No	16	Ap.	12	July	$25	None
Robert W. Long Hospital [1]	Indianapolis	yes	yes	yes	yes	yes	116	(25)	5	Ap.	12	¶¶	$12.50	Req.
St. Vincent's Hospital	Indianapolis	yes	yes	yes	yes	yes	250	No	6	Ap.	12	July	$25	None
St. Elizabeth's Hospital	Lafayette	95	90	20	6	39	250	No	4	Ap.	12	July	$50	None
Epworth Hospital and Training School	South Bend	47	25	37	25	16	150	No	3	Ap.	12	July	$50	None
St. Anthony's Hospital [1]	Terre Haute	yes	yes	yes	yes	yes	210	No	2	Ap.	12	July	$50	Op.
IOWA														
St. Luke's Methodist Hospital [1]	Cedar Rapids	98	35	20	10	12	175	No	2	Ap.	12	July	No	None
Mercy Hospital	Davenport	60	40	16	7	2	125	No	2	Ap.	12	July	(o)	Req.
Iowa Lutheran Hospital	Des Moines	50	50	25	20	5	150	No	4	Ap.	12	July	$25	Req.
Iowa Methodist Hospital	Des Moines	yes	yes	yes	yes	yes	282	No	8	Ap.	12	July	$25	None
Mercy Hospital	Des Moines	yes	yes	20	22	120	162	No	2	Ap.	12	July	$60	None
State University of Iowa Hospital [1]	Iowa City	124	112	49	62	397	744	No	27	Ap.	12	July	(p)	Req.
St. Joseph Mercy Hospital [1]	Sioux City	132	30	48	20	20	250	No	3	Ap.	12	June	$25	None
KANSAS														
Bell Memorial Hospital	Kansas City	35	35	12	15	23	120	No	5	Ap.	12	July	$25	Req.
St. Margaret's Hospital	Kansas City	yes	yes	yes	yes	yes	400	No	7	Ap.	12	July	$25	Req.
St. Francis Hospital [1]	Wichita	75	75	30	25	45	250	No	4	Ap.	12	July	$50	Req.
Wesley Hospital	Wichita	72	22	29	20	2	145	No	3	Ap.	12	July	$62.50	None
Wichita Hospital [1]	Wichita	yes	yes	yes	yes	yes	115	No	2	Ap.	12	July	$50	None
KENTUCKY														
St. Elizabeth's Hospital	Covington	60	135	30	..	75	300	No	5	Ap.	12	July	$50	None
Good Samaritan Hospital [1]	Lexington	yes	yes	20	21	78	119	No	2	Ap.	12	June	$50	None
Louisville City Hospital	Louisville	120	120	40	56	64	400	No	(q)	Ap.	12	July	(r)	Req.
St. Anthony Hospital	Louisville	75	70	18	12	..	175	No	3	Ap.	12	July	$50	None
Sts. Mary and Elizabeth Hospital	Louisville	89	12	14	12	18	145	No	2	Ap.	12	July	$35 (a)	None
LOUISIANA														
Charity Hospital [1]	New Orleans	332	300	65	89	514	1,300	No	50	Ap.	*	July	No	Req.
Hotel Dieu [1]	New Orleans	192	20	36	9	28	285	No	8	Ap.	12	July	$50	Req.
Touro Infirmary	New Orleans	yes	yes	yes	yes	yes	400	No	17	Ap.	12	July	$20	Req.
T. E. Schumpert Memorial Sanitarium	Shreveport	78	44	10	4	64	200	No	2	Ap.	12	July	$50	Op.
Shreveport Charity Hospital	Shreveport	112	60	20	20	8	250	No	10	Ap.	12	July	$25	Req.
MAINE														
Eastern Maine General Hospital	Bangor	48	20	9	10	43	130	No	3	Ap.	12	July	(s)	None
Central Maine General Hospital [1]	Lewiston	45	45	16	..	19	125	No	2	Ap.	12	July	$50	None
Maine General Hospital [1]	Portland	yes	yes	21	24	155	200	No	4	Ap.	12	July	No	Req.
MARYLAND														
Baltimore City Hospitals	Baltimore	138	360	..	..	475	973	No	10	Ex.	12	July	$25	Op.
Church Home and Infirmary	Baltimore	yes	yes	yes	yes	yes	176	No	6	Ap.	12	July	No	None

Numerical and other references will be found on pages 1062 and 1063.

Name of Hospital	Location	Number of Beds: Surgical	Medical	Obstetric	Pediatric	Other	Total	Affiliated—For What Service	Internships: Number	By Examination or Appointment	Length of Service in Months	Begin	Salary per Month	Dispensary Service
MARYLAND—Continued														
Franklin Square Hospital	Baltimore	yes	yes	yes	yes	yes	110	No	4	Ap.	12	July	(t)	Req.
Hebrew Hospital [1]	Baltimore	51	51	29	19	40	190	No	16	Ap.	12	July	No	Req.
Johns Hopkins Hospital [1]	Baltimore	65	78	77	100	403	723	No	37	Ap.	12	Sept.	No	Req.
Maryland General Hospital	Baltimore	110	60	28	22	..	220	No	10	Ap.	12	July	$10 (u)	Req.
Mercy Hospital	Baltimore	128	80	18	31	18	275	No	17	Ap.	12	July	No	Req.
St. Agnes Hospital	Baltimore	143	24	20	18	..	205	No	8	Ap.	12	July	No	Req.
St. Joseph Hospital	Baltimore	190	60	28	yes	11	289	No	10	Ap.	12	July	No	Req.
Union Memorial Hospital	Baltimore	yes	yes	..	yes	yes	152	No	8	Ap.	12	July	No	None
University of Maryland Hospital [1]	Baltimore	121	70	32	19	8	250	No	13	Ap.	12	July	No	Op.
MASSACHUSETTS														
Boston City Hospital	Boston	249	228	105	131	538	1,251	No	66	Ex.	++	¶¶	No	Req.
Carney Hospital	Boston	76	70	42	12	20	220	No	16	Ap.	16	+++	No	Req.
Massachusetts General Hospital [23]	Boston	203	105	..	40	60	408	No	33	Ex.	21	†	No	Req.
Massachusetts Homeopathic Hospital [1]	Boston	162	60	91	46	258	617	No	(v)	Ap.	12	July	No	Req.
New England Hospital for Women and Children, Roxbury [2]	Boston	30	15	75	30	..	150	No	6	Ap.	12	July	No	Req.
Peter Bent Brigham Hospital	Boston	88	88	..	..	47	223	No	19	Ex.	12-16	(aa)	No	Req.
St. Elizabeth's Hospital	Boston	83	48	39	20	10	200	No	6	Ex	18	(bb)	No	Req.
Brockton Hospital [1]	Brockton	yes	yes	yes	yes	yes	131	No	2	Ap.	12	(cc)	$25	Req.
Cambridge Hospital	Cambridge	75	25	25	..	..	125	No	2	Ap.	12	Apr. & Oct.	No	Req.
Fall River General Hospital	Fall River	35	48	44	21	..	148	No	3	Ap.	12	(dd)	$41	Req.
Union Hospital	Fall River	yes	yes	30	30	114	174	No	4	Ap.	12	Jan. & July	(w)	Req.
Burbank Hospital	Fitchburg	yes	yes	yes	yes	yes	175	No	1	Ap.	12	July	$25	Req.
Lawrence General Hospital	Lawrence	30	15	40	12	53	150	No	2	Ap.	12	June	$10	Req.
Lowell Corporation Hospital	Lowell	yes	yes	14	10	76	100	No	1	Ap.	12	June	$ 5	Req.
Lowell General Hospital [1]	Lowell	66	22	20	12	..	120	No	1	Ex.	12	July	$25	None
St. John's Hospital	Lowell	yes	yes	yes	yes	yes	148	No	3	Ap.	12	June	No	Op.
Lynn Hospital	Lynn	48	30	20	18	20	136	No	3	Ex.	12	(dd)	(x)	Op.
St. Luke's Hospital	New Bedford	52	20	90	36	96	294	No	4	Ap.	12	July	No	Req.
Newton Hospital	Newton	yes	yes	yes	yes	yes	177	No	2	Ex.	12	July	No	Req.
House of Mercy Hospital	Pittsfield	25	25	32	25	82	189	No	2	Ap.	12	July	$50	Req.
Salem Hospital	Salem	yes	yes	yes	yes	yes	113	No	2	Ap.	12	June & July	$25	Req.
Mercy Hospital	Springfield	75	28	46	19	46	214	No	2	Ap.	12	July	$25	None
Springfield Hospital	Springfield	yes	yes	yes	yes	yes	190	No	3	Ap.	12	July	No	Req.
Waltham Hospital	Waltham	45	20	21	..	40	126	No	3	Ap.	12	Apr.	No	Req.
City Hospital	Worcester	140	100	56	30	74	400	No	14	Ap.	21	(ee)	No	None
Memorial Hospital [2]	Worcester	63	20	60	24	37	204	No	8	Ap.	12	July & Sept.	No	Req.
St. Vincent's Hospital	Worcester	143	36	25	36	10	250	No	2	Ap.	12	July	$25	None
MICHIGAN														
University of Michigan Hospital [1]	Ann Arbor	yes	yes	yes	yes	yes	1,100	No	75	Ap.	12	July	No	Req.
Battle Creek Sanitarium [1]	Battle Creek	66	800	35	15	84	1,000	No	10	Ap.	12	July	No	Req.
Grace Hospital [1]	Detroit	100	80	36	64	82	362	(24)	21	Ap.	12	‡	No	Req.
Harper Hospital	Detroit	280	80	50	30	..	450	(26)	50	Ap.	12-24	July	(y)	Req.
Henry Ford Hospital	Detroit	225	100	24	24	175	548	No	24	Both	18	Jan. & July	(z)	None
Providence Hospital [1]	Detroit	75	50	85	100	40	350	(27)	15	Ap.	12	July	$25	Req.
Receiving Hospital	Detroit	100	154	..	10	92	365	(28)	21	Ap.	12	July	$26.25	Req.
St. Mary's Hospital	Detroit	150	110	30	18	..	308	(26)	12	Ap.	12	July	$25	Req.
Hurley Hospital [1]	Flint	50	50	25	25	25	175	No	5	Ap.	12	July	$25	Op.
Blodgett Memorial Hospital	Grand Rapids	yes	yes	yes	yes	yes	152	No	5	Ap.	12	Jan. & July	No	Req.
Butterworth Hospital	Grand Rapids	102	70	52	30	16	270	(29)	9	Ap.	12	July	$10	Req.
St. Mary's Hospital	Grand Rapids	35	15	15	30	20	115	No	6	Both	12	July	$25	Req.
Highland Park General Hospital	Highland Park	yes	yes	yes	yes	yes	135	No	6	Ap.	12	July	$25	Req.
W. A. Foote Memorial Hospital	Jackson	50	30	23	12	10	125	No	2	Ap.	12	July	$65	Op.
Hackley Hospital [1]	Muskegon	28	28	14	15	30	115	No	1	Ap.	12	July	$25	None
Mercy Hospital	Muskegon	35	25	20	10	10	100	No	1	Ap.	12	July	$50	Op.
Saginaw General Hospital	Saginaw	60	45	35	..	..	140	No	2	Ap.	12	July	$25	Op.
MINNESOTA														
St. Luke's Hospital	Duluth	yes	yes	yes	yes	yes	270	(30)	4	Ap.	12	March	$25	None
St. Mary's Hospital	Duluth	95	95	30	30	30	280	No	6	Ap.	12	Jan. & June	$25	None
Abbott Hospital [1]	Minneapolis	yes	yes	yes	yes	yes	100	No	2	Ap.	12	March	$25	Req.
Fairview Hospital [1]	Minneapolis	100	24	27	8	65	224	(31)	4	Ap.	12	June	$25	Req.
Minneapolis General Hospital [1]	Minneapolis	136	123	40	62	361	722	No	24	Ex.	12	Jan. & July	No	Req.
New Asbury Hospital	Minneapolis	55	39	36	8	30	168	No	3	Ap.	12	Jan. & July	No	None
Northwestern Hospital [1]	Minneapolis	55	47	18	5	..	125	No	3	Ap.	12	March	$25	None
St. Barnabas Hospital [1]	Minneapolis	75	25	46	15	14	175	No	2	Ap.	12	June	$25	None
St. Mary's Hospital	Minneapolis	125	65	35	25	28	278	No	6	Ap.	12	July	$25	None
Swedish Hospital [1]	Minneapolis	100	75	55	..	..	230	No	6	Ap.	12	July & Dec.	$50	None
University Hospital [1]	Minneapolis	105	74	17	35	53	284	(32)	12	Ap.	12	Jan. & July	No	Req.
Ancker Hospital	St. Paul	200	150	55	50	395	850	No	24	Ap.	12	July	No	Req.
Bethesda Hospital	St. Paul	yes	yes	yes	yes	yes	120	No	1	Ap.	12	June	$25	None
Charles T. Miller Hospital, Inc.	St. Paul	yes	yes	yes	yes	yes	216	(33)	7	Ap.	12	July	No	Req.
Mounds Park Sanitarium	St. Paul	44	45	10	6	20	125	No	1	Ap.	12	Jan.	$25	Req.
Northern Pacific Beneficial Association Hospital	St. Paul	74	74	12	..	..	160	No	3	Ap.	12	Jan. & July	$25	Req.
St. Joseph's Hospital	St. Paul	128	38	24	12	48	250	No	4	Ap.	12	July	$25	None
St. Luke's Hospital	St. Paul	63	48	19	26	19	175	No	4	Ap.	12	July	$25	Op.
MISSISSIPPI														
Mississippi State Charity Hospital [1]	Jackson	yes	yes	yes	yes	yes	100	No	2	Ap.	12-24	(ff)	$50-$100	Op.
Natchez Hospital	Natchez	45	60	10	10	..	125	No	4	Ap.	12	June	$25	Req.
Mississippi State Charity Hospital	Vicksburg	30	30	5	5	30	100	No	4	Ap.	12	June	No	None
MISSOURI														
Kansas City General Hospital (white and colored)	Kansas City	75	100	35	45	95	350	No	18	Ap.	12	July	$25	Op.
Research Hospital [1]	Kansas City	yes	yes	yes	yes	yes	275	No	2	Ap.	12	July	$50	None
St. Joseph Hospital	Kansas City	140	45	15	25	..	225	No	4	Ap.	12	July	$50	None
St. Luke's Hospital	Kansas City	46	46	27	21	..	140	No	4	Ap.	12	July	$50	Req.
St. Mary's Hospital	Kansas City	yes	yes	yes	yes	yes	175	No	5	Ap.	12	July	$50	Req.
Alexian Brothers Hospital	St. Louis	57	68	..	..	100	225	(34)	4	Ap.	12	July	$25	None
Barnes Hospital	St. Louis	125	98	47	40	..	310	No	19	Ap.	12-18	Jan. & July	No	Req.
Jewish Hospital	St. Louis	yes	yes	yes	yes	yes	110	No	6	Ap.	12-36	July	(1-a)	None
Missouri Baptist Sanitarium	St. Louis	164	100	38	20	38	360	No	8	Ap.	12	July	$25	None
St. John's Hospital	St. Louis	125	100	25	30	..	280	No	10	Ap.	12-24	July	$20-$50	None
St. Louis City Hospital No. 1 (white)	St. Louis	260	210	50	55	125	700	(35)	(1-b)	Both	12	July	(1-c)	None
S. Louis City Hospital No. 2 (col.)	St. Louis	52	75	20	46	82	275	No	14	Ap.	12	July	$25	None
St. Luke's Hospital [1]	St. Louis	yes	yes	yes	yes	yes	200	No	8	Ap.	12	July	$25	Req.
S. Mary's Infirmary	St. Louis	yes	yes	yes	yes	yes	125	No	8	Ap.	12	July	$16.70	Req.
MONTANA														
Murray Hospital	Butte	50	42	18	..	..	110	No	3	Ap.	12	July	$ 0	p-q.
St. James Hospital	Butte	71	45	12	13	24	165	No	4	Ap.	12	July	$ 0	R p.

Numerical and other references will be found on pages 1062 and 1063.

Name of Hospital	Location	Number of Beds						Affiliated—For What Service	Internships					
		Surgical	Medical	Obstetric	Pediatric	Other	Total		Number	By Examination or Appointment	Length of Service in Months	Begin	Salary per Month	Dispensary Service
NEBRASKA														
St. Elizabeth's Hospital	Lincoln	yes	yes	yes	yes	yes	175	No	2	Ap.	12	July	$25	Op.
Creighton Memorial, St. Joseph's Hospital [1]	Omaha	130	115	18	15	142	420	No	10	Ex.	12	July	$25	Req.
Nebraska Methodist Episcopal Hospital	Omaha	70	65	60	30	..	225	No	8	Ap.	12	July	No	Req.
University Hospital	Omaha	42	42	21	25	..	130	No	9	Ap.	18	**	(1-d)	Req.
NEW JERSEY														
Atlantic City Hospital	Atlantic City	64	64	34	28	35	225	(36)	8	Ap.	12	July	$25	Req.
Bayonne Hospital and Dispensary	Bayonne	40	34	11	16	16	117	No	3	Ap.	12	+++	$25	Req.
Cooper Hospital	Camden	yes	yes	yes	yes	yes	210	No	7	Ap.	12	July	$10(h)	Op.
West Jersey Homeopathic Hospital	Camden	35	18	30	20	47	150	No	4	Ap.	12	June	$50	None
Alexian Brothers' Hospital	Elizabeth	50	50	..	..	..	100	No	1	Ap.	12	June	$50	Req
Elizabeth General Hospital and Dispensary,	Elizabeth	60	36	30	12	62	200	No	5	Ap.	12	July	$25	Req.
St. Elizabeth's Hospital	Elizabeth	75	40	25	20	..	160	No	3	Ap.	12	July	$25	Req.
Englewood Hospital [1]	Englewood	50	25	50	35	10	170	No	6	Ap.	12-24	June	$25 (1-e)	Req.
Hackensack Hospital	Hackensack	90	75	30	30	..	225	No	4	Ap.	12	July	$25	Req.
St. Mary's Hospital	Hoboken	120	110	5	40	125	400	(37)	7	Ap.	12	July & Sept.	$25	Req.
Christ Hospital	Jersey City	78	20	12	24	..	135	No	5	Ap.	15	†	(1-f)	Op.
Jersey City Hospital	Jersey City	125	175	62	83	155	600	No	20	Ex.	18	(gg)	$25	Req.
St. Francis Hospital	Jersey City	102	80	..	38	..	220	No	6	Ap.	12	July & Nov.	$25	Req.
Monmouth Memorial Hospital	Long Branch	40	30	20	24	86	200	No	2	Ap.	12	July	$25	Req.
Mountainside Hospital	Montclair	95	55	41	25	34	250	No	5	Ap.	12	June & July	$25	Req.
Morristown Memorial Hospital	Morristown	20	20	18	12	80	150	No	3	Ap.	12	(hh)	$50	Req.
Hospital of St. Barnabas	Newark	25	25	35	12	38	135	No	2	Ap.	12	July	$50	Req.
Newark Beth Israel Hospital	Newark	40	40	9	13	18	120	No	6	Ap.	12	June & July	$8.33	Req.
Newark City Hospital [1]	Newark	200	140	50	60	250	700	No	21	Ex.	21	†	None	Req.
Newark Memorial Hospital [1]	Newark	yes	yes	yes	yes	..	150	No	2	Ap.	12	July	$25	Op.
St. James' Hospital [1]	Newark	50	27	20	18	..	115	No	4	Both	12	July	$25	Op.
St. Michael's Hospital	Newark	107	183	..	..	10	300	(38)	6	Ex.	14	(ii)	$ 0	Req.
Orange Memorial Hospital	Orange	32	32	32	20	134	250	No	4	Ap.	12	July	$25	Req.
St. Mary's Hospital [1]	Orange	50	35	35	..	30	150	No	2	Ap.	12	Jan.	$25	Req.
Passaic General Hospital [1]	Passaic	75	25	30	25	45	200	No	3	Ap.	12	July	$50	Op.
St. Mary's Hospital	Passaic	28	28	25	..	34	115	No	2	Ap.	12	July	$50	None
Barnert Memorial Hospital [1]	Paterson	35	17	12	10	26	100	No	3	Ap.	12	(jj)	(b)	Req.
Paterson General Hospital	Paterson	48	28	8	39	44	167	No	4	Ap.	12	July	$25 (a)	Op.
St. Joseph Hospital [1]	Paterson	50	32	60	31	95	268	No	6	Ap.	12	July	$25	Req.
Muhlenberg Hospital [1]	Plainfield	62	36	20	10	7	135	No	4	Ap.	12	July	$ 5	Req.
Mercer Hospital [1]	Trenton	54	40	17	16	48	175	No	3	Ap.	12	July	$33.33	Op.
St. Francis Hospital	Trenton	109	52	48	16	..	225	(39)	5	Ex.	12	July	$50	Req.
William McKinley Memorial Hospital	Trenton	yes	yes	yes	yes	yes	136	No	3	Ap.	12	July	$50	Req.
North Hudson Hospital [1]	Weehawken	yes	yes	yes	yes	yes	92§	No	3	Ex.	12	†††	$25	Op.
NEW YORK														
Albany Hospital [1]	Albany	yes	yes	yes	yes	yes	433	No	11	Ap.	12	July & Oct.	No	Req.
St. Peter's Hospital [1]	Albany	73	45	2	8	7	135	(40)	4	Ex.	12	July	$50	Req.
Auburn City Hospital [1]	Auburn	yes	yes	yes	yes	yes	8	No	3	Ap.	12	July	$25	None
Binghamton City Hospital	Binghamton	24	24	40	14	72	174	No	4	Ap.	12	July	$50	None
Beth Moses Hospital	Brooklyn	92	42	60	18	..	212	No	9	Ex.	18	July	No	Op.
Brooklyn Hospital	Brooklyn	94	52	44	30	74	294	No	14	Ex.	24	July	No	Op.
Brownsville and East New York Hospital	Brooklyn	41	32	26	18	28	145	No	8	Ap.	12	June	No	None
Cumberland Hospital	Brooklyn	94	76	53	67	110	400	No	20	Ap.	24	July	No	Req
Greenpoint Hospital [1]	Brooklyn	90	60	55	30	29	264	No	12	Ap.	24	July	No	Op.
Hospital of the Holy Family	Brooklyn	52	24	13	5	16	110	No	6	Ap.	16	May & June	No	Req.
Jewish Hospital [1]	Brooklyn	90	75	65	35	100	365	No	11	Ap.	24	Jan. & July	No	None
Kings County Hospital	Brooklyn	509	903	90	52	165	1,809	No	26	Ap.	26	**	No	Req.
Long Island College Hospital	Brooklyn	78	63	30	40	259	470	No	30	Ap.	12	July	(1-g)	Req.
Methodist Episcopal Hospital	Brooklyn	100	50	100	50	25	325	No	10	Ap.	24	July	No	None
Norwegian Lutheran Deaconess Home and Hospital [1]	Brooklyn	40	22	29	20	98	209	No	7	Ap.	12	June & Sept.	(1-h)	None
St. Catherine's Hospital	Brooklyn	yes	yes	yes	yes	yes	296	No	12	Ap.	24	July	No	Op.
St. John's Hospital	Brooklyn	yes	yes	yes	yes	yes	100§	No	4	Ap.	12	(kk)	$25	None
St. Mary's Hospital	Brooklyn	113	91	34	30	42	310	No	10	Ap.	24	July	No	Req.
St. Peter's Hospital	Brooklyn	175	75	..	..	..	250	No	5	Ap.	12	July	No	None
Wyckoff Heights Hospital	Brooklyn	85	35	20	20	15	175	No	8	Ex.	24	July	No	Req.
Buffalo City Hospital [1]	Buffalo	94	149	24	166	430	863	No	30	Ap.	12	July	$40	Req.
Buffalo General Hospital	Buffalo	135	116	28	24	82	385	No	12	Ap.	12	July	No	Req.
Buffalo Hospital of the Sisters of Charity	Buffalo	113	63	..	20	19	215	(41)	10	Ex.	12	July	$25	None
Deaconess Hospital [1]	Buffalo	yes	yes	yes	yes	yes	204	No	5	Ap.	12	July	$10 (1-f)	None
Emergency Hospital of Sisters of Charity	Buffalo	60	40	..	..	..	100	(42)	4	Both	12	July	$25	Req.
Erie County Hospital [1]	Buffalo	81	90	12	..	131	314	No	2	Ap.	12	July	$50	None
Millard Fillmore Hospital	Buffalo	yes	yes	yes	yes	yes	160	No	3	Ap.	12	July	$50	None
Clifton Springs Sanitarium and Clinic [1]	Clifton Springs	38	329	8	..	..	375	No	3	Ap.	12	July	$25	Req.
Arnot-Ogden Memorial Hospital	Elmira	25	20	12	20	33	110	No	1	Ap.	12	Jan. & July	No	None
Flushing Hospital and Dispensary	Flushing	50	21	31	49	..	151	No	4	Ap.	12	Jan. & July	$50	Req.
St. John's Long Island City Hospital	Long Island City	95	42	30	30	30	227	No	8	Ap.	24	†	No	Op.
Nassau Hospital [1]	Mineola	yes	yes	yes	yes	yes	200	No	3	Ap.	12	July	$50	None
Mount Vernon Hospital	Mount Vernon	42	16	40	12	40	150	No	3	Ex.	18	Jan. & July	(1-j)	Req.
New Rochelle Hospital [1]	New Rochelle	yes	yes	yes	yes	yes	152	No	3	Ex.	12	(aa)	(1-k)	Op.
Bellevue Hospital [1]	New York	414	390	108	117	602	1,634	No	98	Both	12-24	Jan. & July	No	None
Beth Israel Hospital	New York	56	54	6	21	..	137	No	14	Ex.	12-36	Jan. & July	No	None
City Hospital	New York	148	558	76	96	182	1,060	No	32	Ex.	24	Jan. & July	No	Op.
Fifth Avenue Hospital	New York	104	52	35	90	40	321	No	10	Ap.	12	Jan. & July	No	Req.
Fordham Hospital	New York	140	118	53	57	8	376	No	14	Ex.	16	(aa)	No	None
French Hospital	New York	64	42	..	..	..	106	No	6	Ap.	12-24	Jan. & July	No	None
Gouverneur Hospital [1]	New York	75	47	41	22	25	210	No	14	Ex.	12-24	Jan. & July	No	None
Harlem Hospital [1]	New York	73	95	124	34	20	346	No	20	Ex.	24	Jan. & July	No	Op.
Italian Hospital of the Borough of Manhattan	New York	52	10	14	6	15	97§	No	5	Ex.	15	†	(1-m)	Req.
Knickerbocker Hospital	New York	yes	yes	yes	yes	yes	108§	No	6	Ap.	24	(mm)	No	Op.
Lebanon Hospital	New York	51	45	18	20	58	192	No	11	Ex.	20-32	(nn)	No	Op.
Lenox Hill Hospital	New York	80	50	29	70	116	345	No	8	Ex.	24	Feb. & Aug.	No	None
Lincoln Hospital and Home	New York	125	75	46	13	91	350	No	16	Ap.	24	†	$15-$25	Req.
Metropolitan Hospital [1]	New York	264	401	74	308	286	1,333	No	40	Ap.	12	Jan. & July	No	Req.
Mt. Sinai Hospital [1]	New York	yes	yes	yes	yes	yes	650	No	32	Ex.	24	(aa)	No	None
New York Homeopathic Medical College and Flower Hospital	New York	127	50	32	20	..	229	No	9	Ap.	12	July	$25	Req.
New York Hospital [1]	New York	153	136	..	..	17	306	No	16	Both	24	Jan. & July	No	Op.
New York Infirmary for Women and Children [2]	New York	20	11	37	44	18	130	No	5	Ap.	12	July & Sept.	$10	Req.
New York Polyclinic Medical School and Hospital	New York	65	35	33	25	137	295	(43)	14	Ap.	24	Jan. & June	No	Op.

Numerical and other references will be found on pages 1062 and 1063.

Name of Hospital	Location	Number of Beds						Affiliated—For What Service	Internships					Dispensary Service
		Surgical	Medical	Obstetric	Pediatric	Other	Total		Number	By Examination or Appointment	Length of Service in Months	Begin	Salary per Month	
NEW YORK—Continued														
New York Post Graduate Medical School and Hospital	New York	167	61	..	58	131	417	No	34	Ex.	12-27	†	No	Op.
Presbyterian Hospital [1]	New York	98	90	..	28	39	255	No	22	Ex.	20	(nn)	No	Req.
Roosevelt Hospital	New York	yes	yes	yes	yes	yes	377	No	19	Ex.	24	Jan. & July	No	Op.
St. Francis Hospital	New York	250	200	..	..	..	450	No	8	Ap.	24	Jan. & July	No	None
St. Luke's Hospital	New York	233	152	..	32	..	417	No	16	Ex.	24	Jan. & July	No	Op.
St. Mark's Hospital	New York	yes	yes	yes	yes	yes	160	No	8	Ex.	24	(ff)	$15	None
St. Vincent's Hospital	New York	222	130	..	..	..	352	No	18	Ex.	18-24	Jan. & July	No	None
U. S. Marine Hosp. No. 43 (Ellis Island)	New York	36	325	8	90	203	662	No	5	Ap.	12	July	$75	None
United Hospital [1]	Port Chester	yes	yes	yes	yes	yes	100	No	3	Ap.	12	July	$25-$50	Op.
Vassar Brothers' Hospital	Poughkeepsie	yes	yes	yes	yes	yes	217	No	4	Ap.	24	July	(l-n)	Op.
Highland Hospital	Rochester	yes	yes	yes	yes	yes	169	No	4	Ex.	12	July	$25	Req.
Rochester General Hospital	Rochester	101	39	45	11	117	313	No	12	Ap.	12-36	July	(l-o)	Req.
Rochester Homeopathic Hospital [1]	Rochester	81	47	36	27	..	191	No	6	Ap.	12	July	$25	Req.
St. Mary's Hospital	Rochester	75	75	25	20	5	200	No	6	Ap.	12	July	$25	Req.
Strong Memorial Hospital [1]	Rochester	62	66	30	45	42	245	(76)	28	Ex.	12	July	No	Req.
Ellis Hospital	Schenectady	165	30	30	30	20	275	No	5	Ap.	12	June	$50	None
Staten Island Hospital (Tompkinsville)	Staten Island	44	39	14	33	45	175	No	5	Ap.	15	†	$30	Op.
Syracuse University Hospital of the Good Shepherd	Syracuse	yes	yes	yes	yes	yes	244	No	6	Ex.	12	July	No	None
Syracuse Memorial Hospital [1]	Syracuse	yes	yes	yes	yes	yes	150	No	3	Ap.	12	July	No	None
Samaritan Hospital	Troy	48	40	6	15	70	179	No	3	Ap.	12	(jj)	$50	Req.
Grasslands Hospital [1]	Valhalla	74	124	10	30	138	376	No	9	Ap.	12	July	$50	Req.
St. John's Riverside Hospital	Yonkers	32	22	..	26	22	102	No	4	Ap.	12-18	(oo)	$25	Op.
St. Joseph's Hospital	Yonkers	41	35	26	..	..	102	...	3	Ap.	18	.....	No	.....
NORTH CAROLINA														
Watts Hospital [1]	Durham	57	35	20	12	11	135	No	3	Ap.	12	July & Aug.	$75	Req.
Rex Hospital	Raleigh	45	30	20	20	20	125	No	2	Ap.	12	June	$75	None
James Walker Memorial Hospital [2]	Wilmington	67	22	20	25	..	134	No	4	Ap.	12	July	$25	Req.
NORTH DAKOTA														
Bismarck Evangelical Hospital [2]	Bismarck	75	25	15	..	25	140	No	2	Ap.	12	June	$50	None
St. John's Hospital [1]	Fargo	90	35	35	15	..	175	(44)	2	Ap.	12	Mar. & July	$25	None
OHIO														
City Hospital	Akron	yes	yes	yes	..	..	210	(45)	6	Ap.	12	July	$25	Req.
Bethesda Hospital	Cincinnati	70	68	44	33	..	215	No	8	Ap.	12	July	$25 (1-p)	Req.
Christ Hospital	Cincinnati	80	48	20	..	17	165	(46)	5	Ap.	12	July	$25	Req.
Cincinnati General Hospital [1]	Cincinnati	125	100	42	108	340	715	(47)	24	Ap.	12	July	No	Req.
Good Samaritan Hospital [1]	Cincinnati	126	56	24	34	..	240	(48)	10	Ap.	12	July	$25	None
Jewish Hospital	Cincinnati	88	60	53	50	40	291	No	6	Ap.	12	July	$25	None
St. Mary Hospital	Cincinnati	100	50	..	15	..	165	No	4	Ap.	12	July	$50	Req.
Cleveland City Hospital [1]	Cleveland	140	180	50	65	615	1,050	No	24	Ap.	12	July	No	Req.
Lakeside Hospital	Cleveland	87	73	..	27	86	273	(49)	21	Ap.	12	July	No	Req.
Mt. Sinai Hospital	Cleveland	yes	yes	yes	yes	yes	262	(50)	10	Ap.	12	July	$10 (1-q)	Op.
St. Alexis Hospital	Cleveland	116	54	..	30	..	200	(51)	8	Ap.	12	July	$25	Op.
St. John's Hospital	Cleveland	82	38	26	12	26	184	No	6	Ap.	12	July	$25	Req.
St. Luke's Hospital [1]	Cleveland	58	40	19	20	43	180	No	7	Ap.	12	July	$25	Req.
St. Vincent Charity Hospital	Cleveland	215	40	..	20	..	275	No	10	Ap.	12	July	No	Req.
Grant Hospital	Columbus	184	57	29	30	..	300	No	8	Ap.	12	June	$50	Req.
Hawkes Hospital of Mt. Carmel	Columbus	147	36	17	25	..	225	No	6	Ap.	12	July	$25 (h)	None
St. Francis Hospital	Columbus	80	80	..	..	..	160	(52)	4	Ap.	12	July	$16.66	Req.
White Cross Hospital	Columbus	yes	yes	yes	yes	yes	260	No	6	Both	12	Jan. & July	$25	Req.
Miami Valley Hospital	Dayton	yes	yes	yes	yes	yes	361	No	9	Ap.	12	July	$25	Req.
St. Elizabeth Hospital	Dayton	95	75	60	10	203	443	No	4	Ap.	12	July	$25	Req.
City Hospital	Springfield	34	25	25	12	36	132	No	3	Ap.	12	July	$50	Req.
Lucas County Hospital	Toledo	64	74	10	18	170	336	No	6	Ap.	12	Jan. & July	$50	Req.
St. Vincent's Hospital	Toledo	102	85	35	49	9	340	No	9	Ap.	12	July	$25	Req.
Toledo Hospital	Toledo	65	40	15	10	..	130	No	4	Ap.	12-24	July	$60	Req.
St. Elizabeth's Hospital	Youngstown	70	50	25	55	..	200	No	4	Ap.	12	July	$30	Req.
Youngstown Hospital [1]	Youngstown	66	50	52	30	77	275	No	7	Ap.	12	July	$25	Req.
OKLAHOMA														
St. Anthony Hospital [1]	Oklahoma City	50	50	50	25	5	180	No	4	Ap.	12	June & July	$25 (1-h)	Req.
State University Hospital [1]	Oklahoma City	100	100	26	60	..	286	No	8	Ap.	12	July	$25	Op.
OREGON														
Emanuel Hospital	Portland	yes	yes	yes	yes	yes	250	No	2	Ap.	12	July	$10	Op.
Good Samaritan Hospital [1]	Portland	189	100	20	10	..	319	No	9	Ap.	12	June	$20	None
Multnomah Hospital [1]	Portland	60	80	15	20	25	200	(53)	10	Ap.	18	July & Oct.	$25	None
Portland Sanitarium [1]	Portland	50	30	20	..	24	124	No	2	Ap.	12	July	$65-$75	Req.
St. Vincent's Hospital	Portland	196	130	30	14	30	400	No	7	Ap.	12	July	$40	None
PENNSYLVANIA														
Abington Memorial Hospital	Abington	53	19	44	12	12	140	No	4	Ap.	12	July	$50	Req.
Allentown Hospital [1]	Allentown	60	40	20	30	50	200	No	6	Ap.	12	June	No	Req.
Sacred Heart Hospital	Allentown	63	35	12	14	45	169	No	4	Ap.	12	July	No	Req.
Altoona Hospital	Altoona	68	48	20	17	27	180	No	4	Ap.	12	July	$25	None
St. Luke's Hospital	Bethlehem	76	50	20	30	8	184	No	6	Ap.	12	July	No	Req.
Bryn Mawr Hospital	Bryn Mawr	44	28	48	20	..	140	No	4	Ap.	12	July & Oct.	$50	Req.
Chester Hospital [1]	Chester	128	71	19	15	17	250	No	4	Ap.	12	July	$20	Req.
G. F. Geisinger Memorial Hospital	Danville	60	60	16	10	10	156	(54)	8	Ap.	12	June	No	None
Easton Hospital [1]	Easton	60	34	8	15	..	117	No	4	Ap.	12	July	$25	Req.
Hamot Hospital	Erie	43	24	50	25	78	220	No	6	Ap.	12	July	$25	None
St. Vincent's Hospital	Erie	yes	yes	yes	yes	yes	214	No	7	Ap.	12	July	$25	.....
Harrisburg Hospital [1]	Harrisburg	yes	yes	yes	yes	yes	217	No	7	Ap.	12	July	$25	Req.
Conemaugh Valley Memorial Hospital	Johnstown	74	60	16	31	..	181	No	5	Ap.	12	June	$25	None
Lancaster General Hospital [1]	Lancaster	40	40	25	25	20	150	No	6	Ap.	12	July	$25	Req.
McKeesport Hospital	McKeesport	74	44	10	8	24	160	No	6	Ap.	12	July	$25	Req.
Frankford Hospital [1]	Philadelphia	50	24	34	15	7	130	No	6	Ap.	12	June	$20	Req.
Frederick Douglass Memorial Hosp. (col.) [1]	Philadelphia	24	24	10	10	7	75	No	3	Ap.	12	July & Sept.	No	Req.
Germantown Dispensary and Hospital	Philadelphia	54	37	24	21	39	175	No	6	Ap.	18	Jan. & July	No	Req.
Hahnemann Hospital	Philadelphia	89	51	42	28	199	409	No	14	Ap.	12	July	No	Req.
Hospital of Protestant Episcopal Church	Philadelphia	264	166	..	20	..	450	(55)	16	Ap.	24	Jan. & July	No	Req.
Hospital of the University of Pennsylvania [1]	Philadelphia	yes	yes	yes	yes	yes	562	No	22	Ap.	24	(pp)	No	Req.
Hospital of Woman's Medical College [2]	Philadelphia	yes	yes	yes	yes	yes	134	No	6	Ap.	12	(qq)	No	Req.
Jefferson Medical College Hospital	Philadelphia	156	137	34	48	260	635	No	20	Ex.	24	June	No	Req.
Jewish Hospital	Philadelphia	76	65	..	16	68	225	(56)	9	Ex	18	July	No	Req.
The Lankenau Hospital	Philadelphia	140	96	9	..	12	257	No	8	Ap	24	†	No	Req.
Memorial Hospital	Philadelphia	32	21	12	6	29	100	No	4	Ap.	12	July	$25	Req.
Mercy Hospital (col.) [1]	Philadelphia	20	21	20	10	29	100	No	5	Ap.	12	July & Oct.	No	Req.
Methodist Episcopal Hospital [1]	Philadelphia	yes	yes	yes	yes	yes	300	No	8	Ex.	12	July	No	Req.

Numerical and other references will be found on pages 1062 and 1063.

Name of Hospital	Location	Number of Beds						Affiliated—For What Service	Internships					Dispensary Service
		Surgical	Medical	Obstetric	Pediatric	Other	Total		Number	By Examination or Appointment	Length of Service in Months	Begin	Salary per Month	
PENNSYLVANIA—Continued														
Misericordia Hospital[1]	Philadelphia	71	50	34	25	120	300	No	12	Both	12	July	No	Req.
Mount Sinai Hospital[1]	Philadelphia	75	60	..	25	..	160	(56)	10	Ex.	12	June	No	Op.
Pennsylvania Hospital	Philadelphia	205	113	..	..	..	318	(57)	16	Ap.	24	July	No	Req.
Philadelphia General Hospital[1]	Philadelphia	307	475	100	145	1,073	2,100	(58)	53	Ex.	24	July	No	Req.
Polyclinic and Medico-Chirurgical Hosp.[1]	Philadelphia	75	72	36	57	123	363	No	18	Ex.	12	July	No	Req.
Presbyterian Hospital	Philadelphia	yes	yes	yes	yes	yes	302	No	10	Ex.	24	July	No	Req.
Samaritan Hospital[1]	Philadelphia	120	39	45	12	16	232	No	8	Ex.	12	July	No	Req.
St. Agnes Hospital	Philadelphia	147	88	50	28	18	331	No	9	Ap.	12	July	No	Req.
St. Joseph's Hospital	Philadelphia	63	60	6	22	24	175	(59)	9	Ap	12	July	No	Req.
St. Mary's Hospital	Philadelphia	96	37	40	23	12	208	No	7	Ap.	12	July	No	Req.
Women's Homeopathic Hospital[1]	Philadelphia	47	40	60	28	60	235	No	4	Ex.	12	June	No	Req.
Woman's Hospital of Philadelphia[2]	Philadelphia	41	34	75	35	..	185	No	8	Ap.	12	July	$20	Op.
Allegheny General Hospital	Pittsburgh	143	60	52	57	88	400	No	12	Ap.	12	July & Aug.	No	Req.
Mercy Hospital[1]	Pittsburgh	225	83	26	60	186	580	No	18	Ex.	12	July	No	Req.
Montefiore Hospital Association	Pittsburgh	yes	yes	yes	yes	yes	65§	No	3	Ap.	12	July	No	Req.
Passavant Hospital[1]	Pittsburgh	24	63	32	12	24	155	(60)	8	Ap.	12	July	$35	Req.
Pittsburgh Homeopathic Hospital[1]	Pittsburgh	86	40	24	20	..	170	No	6	Ap.	12	July	No	Req.
Pittsburgh Hospital	Pittsburgh	42	36	36	6	..	120	No	4	Ap.	12	July	No	Req.
Presbyterian Hospital	Pittsburgh	80	49	34	37	..	200	No	6	Ap.	12	July	No	Req.
South Side Hospital[1]	Pittsburgh	59	45	21	26	74	225	No	6	Ap.	12	July	No	Req.
St. John's General Hospital	Pittsburgh	175	150	30	40	220	615	(61)	16	Ap.	12	July	No	Op.
St. Joseph's Hospital and Dispensary	Pittsburgh	95	39	20	48	..	202	No	5	Ap.	12	July	No	Req.
St. Margaret Memorial Hospital	Pittsburgh	45	35	4	18	28	130	No	4	Ap.	12	July	No	Req.
Western Pennsylvania Hospital[1]	Pittsburgh	50	55	29	14	..	148	No	4	Ap.	12	July	No	.....
Pottsville Hospital	Pittsburgh	249	131	32	27	61	500	No	20	Ap.	12	July	$25	Req.
Reading Hospital[1]	Pottsville	40	28	16	9	47	140	No	4	Ap.	12	July	No	Req.
Robert Packer Hospital	Reading	55	28	20	10	37	150	No	6	Ap.	12	July	$25	None
Hahnemann Hospital	Sayre	yes	yes	yes	yes	yes	235	No	6	Ap.	12	July	No	Req.
Scranton State Hospital[1]	Scranton	24	20	11	12	58	125	No	3	Ap.	12	July & Oct.	$8.33	Req.
Uniontown Hospital[1]	Scranton	81	48	15	11	33	188	No	6	Ap.	12	July	$12.50	Req.
Chester County Hospital	Uniontown	78	50	20	5	25	178	No	6	Ap.	12	July	$8.33	Req.
Mercy Hospital[1]	West Chester	24	30	16	yes	46	116	No	3	Ap.	12	July	$25	Req.
Wilkes-Barre General Hospital[1]	Wilkes-Barre	67	56	20	35	7	185	No	4	Ex.	12	July	$50	None
Columbia Hospital[1]	Wilkes-Barre	95	45	23	..	88	251	No	5	Ap.	12	July	No	Req.
York Hospital[1]	Wilkinsburg	50	50	46	15	35	196	No	5	Ap.	12	July	No	Req.
	York	34	35	12	25	..	106	No	3	Ap.	12	July	$25	Req.
RHODE ISLAND													$35	Req.
State Infirmary[1]	Howard	yes	yes	yes	yes	yes	600	(62)	2	Ap.	12	July	$50	None
Memorial Hospital	Pawtucket	yes	yes	yes	yes	yes	100	No	3	Ap.	12	(rr)	$16.67	Op.
Rhode Island Hospital	Providence	250	200	25	50	75	600	No	14	Ap.	12	†	No	None
St. Joseph's Hospital	Providence	yes	yes	yes	yes	yes	184	No	4	Ap.	12	July	No	Req.
SOUTH CAROLINA														
Roper Hospital	Charleston	100	120	30	50	..	300	No	12	Ap.	12	July	No (1-r)	Op.
Columbia Hospital of Richland County	Columbia	yes	yes	yes	yes	yes	125	No	3	Ap.	12	July	$30	Req.
South Carolina Baptist Hospital	Columbia	49	50	9	17	..	125	No	2	Ap.	12	June	$50	Req.
Greenville City Hospital[1]	Greenville	50	34	13	10	18	125	No	3	Ap.	12	July	$50	Req.
TENNESSEE														
Baroness Erlanger Hospital	Chattanooga	100	50	15	25	10	200	No	5	Ap.	12	July	$50	Req.
Knoxville General Hospital	Knoxville	92	35	18	10	45	200	No	6	Ap.	12	July	$50	Req.
Baptist Memorial Hospital	Memphis	yes	yes	yes	yes	yes	350	No	5	Ap.	12	July	$50	None
Memphis General Hospital	Memphis	36	58	30	25	121	290§	No	15	Ap.	12	July	$25	Req.
St. Joseph's Hospital[1]	Memphis	100	80	30	20	20	250	No	5	Ap.	12	July	...	None
Geo. W. Hubbard Hospital (col.)	Nashville	37	45	12	29	17	140	No	4	Ex.	12	Jan. & July	No	Req.
Nashville General Hospital	Nashville	40	25	20	20	45	150	No	6	Ap	12	July	$25	Req.
Protestant Hospital[1]	Nashville	yes	yes	yes	yes	yes	82§	No	4	Ap.	12	July	$50	None
St. Thomas Hospital	Nashville	150	25	25	..	..	200	No	6	Ap.	12	June	$40	Op.
Vanderbilt University Hospital	Nashville	yes	yes	yes	yes	yes	180	No	7	Ap.	12	July	$25	Req.
TEXAS														
Hotel Dieu	Beaumont	yes	yes	yes	yes	yes	150	No	1	Ap.	12	June	No	None
Baylor Hospital[1]	Dallas	174	73	50	50	67	414	No	13	Ap.	12	July	$25	Op.
Parkland Hospital	Dallas	64	52	31	10	117	274	...	10	....	12	.....	...	.....
St. Paul's Sanitarium[1]	El Paso	163	67	30	18	22	300	No	8	Ap.	12	July	$25	Req.
William Beaumont General Hospital	Ft. Worth	141	237	25	yes	..	403	No	8	Ap.	12	July	(f)	Req.
Harris Hospital	Galveston	50	25	10	8	7	100	No	2	Ap.	12	July	$25	Req.
John Sealy Hospital	Galveston	98	144	18	15	45	320	No	8	Ap.	12	June & July	No	Req.
St. Mary's Infirmary[1]	Houston	50	50	12	15	73	200	No	2	Ap.	12	June	$25	None
Baptist Hospital	Houston	yes	yes	yes	yes	yes	200	No	3	Ap.	12	June	$50	Req.
St. Joseph's Infirmary[1]	San Antonio	166	60	18	6	..	250	No	4	Ap.	12	July	$40	Req.
Robert B. Green Memorial Hospital[1]	San Antonio	34	17	15	17	52	135	No	6	Ap.	12	July	$25	None
Santa Rosa Infirmary	San Antonio	79	54	17	15	135	300	No	5	Ap.	12	July	$40	None
Station Hospital, Fort Sam Houston	Temple	295	490	15	..	..	800	No	13	Ap.	12	July	$40	None
Gulf, Colorado & Sante Fe Hospital	Temple	50	75	..	..	..	125	(63)	2	Ap.	12	July	(f)	Req.
Scott and White Hospital	Waco	yes	yes	yes	yes	yes	135	(64)	3	Ap.	12	July	$50	None
Providence Sanitarium		60	20	16	12	42	150	No	2	Ap.	12	July	$50	None
UTAH													$50	Op.
Thomas D. Dee Memorial Hospital	Ogden	50	40	20	15	10	135	No	2	Ap.	12	July	$50	Req.
Dr. Groves' Latter Day Saints Hospital[1]	Salt Lake City	136	59	33	22	..	250	No	5	Ap.	12	July	$25	None
Holy Cross Hospital	Salt Lake City	100	41	31	20	33	225	No	3	Ap.	12	July	$50	None
Salt Lake County General Hospital	Salt Lake City	40	51	12	14	79	196	No	3	Ap.	12	July	$30 (1-s)	Req.
St. Mark's Hospital	Salt Lake City	yes	yes	yes	yes	yes	150	No	2	Ap.	12	July	$50	None
VERMONT														
Mary Fletcher Hospital[1]	Burlington	yes	yes	yes	yes	yes	150	No	5	Ap.	12	July & Sept.	(1-g)	Req.
VIRGINIA														
Hospital of St. Vincent de Paul	Norfolk	105	58	22	45	22	252	No	5	Ap.	12	July	$25	Req.
Norfolk Protestant Hospital	Norfolk	68	25	25	7	..	125	No	3	Ap.	12	July	$25	None
U. S. Marine Hospital No. 82	Norfolk	80	72	..	..	56	217	(65)	2	Ap.	12	July	(f)	Req.
Medical College of Virginia, Hospital Div.[1]	Richmond	yes	yes	yes	yes	yes	424	No	12	Ap.	12	July	($j)	Req.
Retreat for the Sick[1]	Richmond	60	18	10	8	10	106	No	3	Ap.	12	July	$50	None
Jefferson Hospital	Roanoke	yes	yes	yes	yes	yes	100	No	4	Ap.	12	July	$50	Req.
University of Virginia Hospital[1]	University	75	60	25	40	60	260	(66)	18	Ap.	24	†	No	Req.
WASHINGTON														
King County Hospital[1]	Seattle	66	132	13	9	..	220	No	3	Ap.	12	July	$50	Req.
Seattle City Hospital	Seattle	yes	yes	yes	yes	yes	125	(67)	6	Ap.	12	July	$75	Req.
Seattle General Hospital	Seattle	50	20	30	..	30	140	(68)	4	Ap.	12	***	$50	Req.

Numerical and other references will be found on pages 1062 and 1063.

Name of Hospital	Location	Number of Beds						Affiliated—For What Service	Internships					
		Surgical	Medical	Obstetric	Pediatric	Other	Total		Number	By Examination or Appointment	Length of Service in Months	Begin	Salary per Month	Dispensary Service
Swedish Hospital [1]	Seattle	yes	yes	yes	yes	yes	152	(68)	4	Ap.	12	July & Aug.	$50	Req.
Virginia Mason Hospital	Seattle	34	24	12	..	20	100	No	2	Ap.	12	.....	$50	Req.
Maria Beard Deaconess Hospital [1]	Spokane	70	60	32	16	30	208	No	3	Ap.	12	July	$50	Op.
St. Luke's Hospital	Spokane	90	40	30	15	..	175	No	3	Ap.	12	July	$50	Req.
Northern Pacific Beneficial Association Hospital	Tacoma	45	50	12	10	18	135	(69)	2	Ap.	12	July	$25	Req.
Tacoma General Hospital [1]	Tacoma	59	48	28	14	11	160	No	3	Ap.	12	July	$50	Req.
WEST VIRGINIA														
Charleston General Hospital	Charleston	yes	yes	yes	yes	yes	200	(70)	4	Ap.	12	July	$50	Op.
Ohio Valley General Hospital	Wheeling	70	60	20	23	..	173	No	3	Ap.	12	June	$50	Op.
Wheeling Hospital	Wheeling	137	55	23	10	..	225	No	4	Ap.	12	July	$50	None
WISCONSIN														
St. Elizabeth Hospital	Appleton	150	50	35	10	5	250	No	2	Ap.	12	July	$50	Op.
St. Joseph's Hospital	Ashland	60	55	25	20	15	175	No	1	Ap.	12	July	$50	Op.
La Crosse Lutheran Hospital	La Crosse	60	20	10	10	10	110	No	2	Ap.	12	July	$50	None
St. Francis Hospital [1]	La Crosse	90	55	25	20	20	210	No	3	Ap.	12	July	$30	None
Madison General Hospital	Madison	68	17	30	10	..	125	No	3	Ap.	12	July	$50	Req.
St. Mary's Hospital	Madison	79	40	40	16	..	175	No	3	Ap.	12	July	$25	Req.
Wisconsin General Hospital [1]	Madison	175	160	25	40	..	400	No	12	Ap.	12	Jan. & July	No	None
St. Joseph's Hospital	Marshfield	yes	yes	yes	yes	yes	150	No	3	Ap.	12	July	$50	Req.
Columbia Hospital	Milwaukee	63	10	20	..	17	110	(71)	5	Ap.	24	July	$25	Req.
Evangelical Deaconess Hospital [1]	Milwaukee	yes	yes	yes	yes	yes	120	No	2	Ap.	12	June	$50	Req.
Marquette University Hospital	Milwaukee	20	20	23	10	82	155	No	4	Ap.	12	July	$50	None
Milwaukee Hospital (The Passavant)	Milwaukee	yes	yes	yes	yes	yes	150	(72)	8	Ap.	12	July	$30	None
Mount Sinai Hospital	Milwaukee	60	36	28	26	..	150	No	5	Ap.	12	July	$25	Req.
St. Joseph's Hospital	Milwaukee	70	35	18	15	..	138	No	2	Ap.	12	July	$25	Op.
St. Mary's Hospital	Milwaukee	103	30	30	16	24	203	No	5	Ap.	12	July	$25	Op.
Mercy and St. Mary's Hospitals	Oshkosh	80	38	20	12	..	150	No	2	Ap.	12	July	$50	None
St. Mary's Hospital	Superior	35	30	23	15	..	103	No	1	Ap.	12	July	$25	Req.
Milwaukee County Hospital [1]	Wauwatosa	100	150	..	..	58	308	(73)	14	Ex.	12	July	$25	Req.
CANADA														
University of Alberta Hospital [1]	Edmonton, Alta	51	65	20	13	42	191	(74)	2	Ex.	12	May	$25	Req.
Montreal General Hospital	Montreal, Que	120	90	..	25	165	400	(75)	34	Ap.	12	July	No	Req.
Royal Victoria Hospital	Montreal, Que	142	122	..	40	196	500	(75)	39	Ap.	12	July	No	Req.
Toronto General Hospital [1]	Toronto, Ont	325	206	62	..	157	750	No	35	Ap.	12	July	No	Req.
Vancouver General Hospital [1]	Vancouver, B. C	191	187	124	97	301	900	No	14	Ap.	12	June	$25	Req.
Winnipeg General Hospital [1]	Winnipeg, Man	240	165	71	16	158	650	No	24	Ex.	12	June & Dec.	No	Req.
CANAL ZONE														
Ancon Hospital	Ancon	300	400	25	80	75	880	No	6	Ap.	12	July	$75	None
HAWAII														
Queen's Hospital	Honolulu	yes	yes	yes	yes	yes	300	(5)	5	Ap.	15	†	(1-t)	Req.
PHILIPPINE ISLANDS														
Philippine General Hospital [1]	Manila	184	124	48	55	143	554	No	30(ss)	Ap.	12	Apr.	No	Req.
FOREIGN														
Peking Union Medical College Hospital [1]	Peking, China	yes	yes	yes	yes	yes	213	No	20	Ap.	12	July	$7.50	Req.

(a) Bonus of $500.
(b) Fifteen dollars a month for first 6 months, $30 a month for last 6 months.
(c) Twelve juniors, 5 seniors.
(d) Juniors July first, seniors August first.
(e) Juniors $10 a month, seniors $25 a month.
(f) $166.67 a month and allowances.
(g) Plus $10 bonus for 99% histories.
(h) Bonus of $100.
(i) Junior $25 a month, senior $75 a month.
(j) $155 a month and quarters but not food.
(k) Bonus of $150.
(l) Juniors $10 a month, seniors $75 to $100 a month.
(m) Bonus at Christmas and end of year plus a small monthly stipend.
(n) Bonus of $100 each 6 months.
(o) Twenty-five dollars a month for first 6 months, $35 a month for last 6 months.
(p) Bonus of $125.
(q) Seventeen juniors, 6 seniors.
(r) Juniors $10 a month, seniors $15 a month, bonus $100.
(s) Twenty-five dollars a month for first 6 months, $50 a month for last 6 months.
(t) Bonus of $60.
(u) Plus 50% of accident fees.
(v) Eleven seniors, 9 juniors.
(w) Thirty dollars and $50 a month.
(x) Ten dollars a month for 11 months and $190 on completion of 12 months satisfactory service.
(y) Twenty-five dollars a month for the second year.
(z) $125 a month for first 6 months, $137.50 for next 6 months and $150 for last 6 months.
(1-a) Juniors $20 a month, seniors $30 a month.
(1-b) Forty-eight juniors, 8 seniors.
(1-c) Juniors $25 a month, seniors $95 a month.
(1-d) Twenty-five dollars a month last 2 months only.
(1-e) Bonus of $250.
(1-f) Twenty-five dollars a month for 14 months, $100 on fifteenth month.
(1-g) Fifty dollars a year.
(1-h) Bonus of $200.
(1-i) Bonus of $75.
(1-j) Fifty dollars a month for first 6 months, $75 for next 6 months and $100 for last 6 months.
(1-k) Eight dollars and thirty-three cents a month for first 4 months, $16.66 for second 4 months and $33.33 for last 4 months.
(1-m) Thirty dollars only for the last 3 months.
(1-n) Thirty-five dollars a month for first year, $45 a month for second year.
(1-o) Twenty-five dollars a month for first year, $50 a month for second year and $100 a month for third year.
(1-p) Bonus of $120.
(1-q) Bonus of $180.
(1-r) Honorarium at end of service.
(1-s) Bonus of $240.
(1-t) Fifty dollars a month for first 6 months, $75 for next 3 months and $100 for last 6 months.
(1-u) Juniors $25 a month, seniors $40 a month.
§ Addition under construction.
* Twelve months with the privilege of an additional twelve months.
** Every two months.
*** Internships for different services begin at different times.
† Every three months.
†† January, July and September.
††† January, June and September.
†††† Every ten weeks.
‡ January, July and October.
‡‡ April, July and October.
‡‡‡ January 1, June 1, June 15, and July 1.
¶ Every month.
¶¶ June and August.
¶¶¶ Surgical, medical and obstetrical services begin first Monday in March, July and November; pediatric service begins first Monday in February, April, June, August, October and December.
++ Surgical, medical, obstetrical services, etc., 20 months and 2 weeks; pediatric service, 10 months.
+++ April, August and December.
(aa) March, July and November.
(bb) March, June, September and December.
(cc) April, July and August.
(dd) June, July and August.
(ee) May 15 and every six weeks.
(ff) When vacancies occur.
(gg) First of every month, August excepted.
(hh) July, August and October.
(ii) June 1, July 15, October 15 and December 15.
(jj) July, August and September.
(kk) February, May, August and November.
(mm) January, May and September.
(nn) February, June and October.
(oo) January, March, May and November.
(pp) Every month from June to November.
(qq) May, June, July, October and December.
(rr) April, June and September.
(ss) Internships for 1926 reserved for the fifth year students of the College of Medicine, University of the Philippines.
1. Women interns admitted.
2. Women interns only.
3. Including tuberculosis.

Affiliations as referred to in column headed: "Affiliated—For What Service."

4. Los Angeles Receiving Hospital, Los Angeles.
5. Kapiolani Maternity Home, Honolulu, for obstetric training.
6. University of California Medical School and Hospital.
7. University of California.
8. Napa State Hospital, Imola, for psychiatric training.
9. University of California Hospital for training in obstetrics, gynecology and pediatrics.
10. St. Francis Hospital, San Francisco, for obstetric training.
11. Baby Hospital, Oakland, for pediatric training, and Arroyo Sanatorium, Livermore, for tuberculosis training.
12. St. Joseph's Hospital, Denver, for training in children's diseases, obstetrics and gynecology; also Children's Hospital, Denver.
14. Hartford Isolation Hospital, Hartford, for contagious diseases.
15. Garfield Memorial Hospital and Children's Hospital, for obstetric and pediatric training.
16. City Hospital, Atlanta.
17. Chicago Fresh Air Hospital, for tuberculosis training.
18. Municipal Contagious Disease Hospital, Chicago.
19. Misericordia Hospital, Chicago, for training in obstetrics and pediatrics.
20. Chicago-Winfield Tuberculosis Sanitarium, Winfield, for tuberculosis training.
21. Norwegian-American Hospital, Chicago, for training in obstetrics, pediatrics and gynecology.
22. Macon County Tuberculosis Sanatorium, Decatur, for tuberculosis training.
23. Women interns admitted to pediatric service.
24. Municipal Hospital, Detroit, for training in tuberculosis and contagious diseases.
25. James Whitcomb Riley Hospital for Children, Indianapolis.
26. Herman Kiefer Hospital, Detroit, for training in obstetrics and contagious diseases; also Children's Free Hospital, Detroit.
27. St. Joseph's Retreat, Dearborn, for training in mental diseases.
28. Herman Kiefer Hospital, Detroit, for obstetric training.
29. Grand Rapids Tuberculosis Sanatorium, Grand Rapids, for tuberculosis training.
30. Children's Home, Duluth, for pediatric training, and Bethel Home for Women and Children, Duluth, for obstetric training.
31. Thomas Tubercular Hospital, Minneapolis.
32. Glen Lake Sanatorium, Oak Terrace, for tuberculosis training.
33. Shriners' Hospital, St. Paul, for orthopedic training.
34. Salvation Army Home and Hospital, St. Louis, for obstetric training.
35. Robert Koch Hospital, Koch, for tuberculosis training; also City Isolation Hospital, City Sanitarium, and City Infirmary.
36. Municipal Hospital, Atlantic City, for contagious diseases; also Tuberculosis Hospital.
37. Jersey City Hospital for obstetric training.
38. Newark Maternity Hospital, for obstetric training.
39. Municipal Hospital, Trenton, for contagious diseases.
40. Brady Maternity Hospital, Albany, for obstetric training.
41. St. Mary's Maternity Hospital, Buffalo, for obstetric training; also Emergency Hospital, Buffalo.
42. Providence Retreat, St. Mary's Maternity Hospital, and Buffalo Hospital of the Sisters of Charity, for training in obstetrics and neurology.
43. Reconstruction Hospital, New York City, for traumatic surgery.
44. City Detention Hospital, Fargo, for contagious diseases.
45. Children's Hospital, Akron, for pediatric training.
46. Children's Hospital of the Protestant Episcopal Church, Cincinnati, for pediatric training.
47. Cincinnati Tuberculosis Sanatorium.
48. Seton Maternity Hospital, Norwood, for obstetric training.
49. Cleveland Maternity Hospital, for obstetric and pediatric training.
50. Cleveland City Hospital, for training in psychiatry and contagious diseases.
51. St. Ann's Maternity Hospital, Cleveland, for obstetric training.
52. University Hospital, Columbus, for obstetric training.
53. Shriners' Hospital, Portland, for orthopedic training.
54. Danville State Hospital, Danville, for training in neurology, psychiatry and neuropsychiatry.
55. Kensington Hospital for Women, Philadelphia, for obstetric training.
56. Jewish Maternity Hospital, Philadelphia, for obstetric training.
57. Philadelphia Lying-In Hospital, for obstetric training.
58. Philadelphia Hospital for Contagious Diseases.
59. St. Vincent's Hospital, Philadelphia, for obstetric training.
60. Mayview City Hospital, Mayview, for psychiatric training.
61. Municipal Hospital, Pittsburgh, for contagious diseases.
62. State Hospital for Mental Diseases, Howard.
63. Scott and White Hospital, Temple, for training in obstetrics, pediatrics, etc.
64. Gulf, Colorado & Santa Fe Hospital, Temple, for additional medical and surgical training.
65. Norfolk Protestant Hospital, Norfolk, for obstetric training, and the Children's Hospital and Clinic of the King's Daughters, Norfolk, for pediatric training.
66. Blue Ridge Sanatorium, Charlottesville, for tuberculosis training.
67. City Tuberculosis and Contagious Hospitals, Seattle.
68. Children's Hospital, Seattle, for orthopedic and pediatric training.
69. Pierce County Hospital, Tacoma, for obstetric and pediatric training.
70. Hill Crest Sanatorium, Charleston, for tuberculosis training.
71. Milwaukee Children's Hospital, Milwaukee Infants' Hospital, and the South View Municipal Hospital, for training in pediatrics and contagious diseases.
72. Milwaukee Children's Hospital, for children's services.
73. Milwaukee County Infirmary.
74. Misericordia and Royal Alexandra Hospitals, Edmonton, for obstetrics and communicable diseases.
75. Alexandra Hospital for Contagious Diseases, Montreal.
76. Municipal Hospital, Rochester.

HOSPITALS PROVIDING APPROVED RESIDENCIES AND COURSES IN CERTAIN SPECIALTIES

BARNES HOSPITAL, 600 S. Kingshighway, St. Louis.—Residencies in the Specialties, Internal Medicine, Obstetrics, Surgery and Gynecology. Dr. L. D. Burlingham, Medical Superintendent.

BLOOMINGDALE HOSPITAL FOR MENTAL DISEASES, White Plains, N. Y.—Courses in Psychiatry. Dr. W. L. Russell, Medical Director.

BOSTON PSYCHOPATHIC HOSPITAL, 74 Fenwood Road, Boston 17, Mass.—Residencies in Neurology and Psychiatry. Dr. Karl M. Bowman, Chief Medical Officer.

CHILDREN'S HOSPITAL OF MICHIGAN, 5224 St. Antoine St., Detroit.—Residencies in Pediatrics. Miss Margaret A. Rogers, R.N., Superintendent.

CHILDREN'S MEMORIAL HOSPITAL, 735 Fullerton Ave., Chicago.—Special Courses in Infant Feeding, Pediatrics and Otolaryngology. Dr. G. E. Baxter, Secretary.

COLORADO PSYCHOPATHIC HOSPITAL, 4200 E. Ninth Ave., Denver, Colo.—Residencies in Neuro-Psychiatry. Dr. Franklin G. Ebaugh, Medical Director.

ELIZABETH STEEL MAGEE HOSPITAL, Forbes and Halket St., Pittsburgh, Pa.—Residencies in Obstetrics and Gynecology. Miss Jesse J. Turnbull, Superintendent.

FITZSIMONS GENERAL HOSPITAL, Denver, Colo.—Special Residencies in Tuberculosis. Address Commanding Officer.

HOSPITAL FOR JOINT DISEASES, Madison Ave. from 123d to 124th Sts., New York City.—Residencies in Orthopedic Surgery, and Physiotherapy. Dr. Henry W. Frauenthal, Medical Director.

ILLINOIS EYE AND EAR INFIRMARY, 904 W. Adams St., Chicago.—Residencies in Ophthalmology and Otology. Dr. Leo Steiner, Managing Officer.

JAMES WHITCOMB RILEY HOSPITAL FOR CHILDREN, Indianapolis.—Residencies in Pediatrics. Dr. Robert E. Neff, Administrator.

JEFFERSON CLINIC AND DIAGNOSTIC HOSPITAL, 2201 Jefferson Ave. E., Detroit, Mich.—Special Residencies in General Surgery. Mr. Carl I. Johnson, Superintendent.

JOHNS HOPKINS HOSPITAL, Baltimore.—Residencies in the Specialties. Dr. Winford H. Smith, Director.

LOUISVILLE CITY HOSPITAL, Preston and Chestnut Sts., Louisville, Ky.—Residencies in Medicine, Surgery, Pathology and Pediatrics. Ernest Shouse, Superintendent.

MANHATTAN EYE, EAR AND THROAT HOSPITAL, 210 E. 64th St., New York City.—Special Internships in Eye and in Ear, Nose and Throat. Mr. Reuben O'Brien, Superintendent.

MANHATTAN MATERNITY AND DISPENSARY, 327 E. 60th St., New York City.—Special Residencies in Obstetrics. Miss Emily A. Porter, R.N., Superintendent.

MASSACHUSETTS EYE AND EAR INFIRMARY, 243 Charles St., Cor. Fruit St., Boston.—Special Internships in Eye, and in Ear, Nose and Throat. Dr. Frederic A. Washburn, Director.

MILWAUKEE CHILDREN'S HOSPITAL, 219, 10th St., Milwaukee.—Special Residencies in Pediatrics. B. M. Henderson, Superintendent.

MISERICORDIA HOSPITAL, 2224 Chestnut St., Milwaukee.—Special Residencies in Obstetrics. Sister Marie Immaculate Conception, R.N., Superintendent.

MONTEFIORE HOSPITAL, Gun Hill Road near Jerome Ave., New York City.—Special Residencies in Medicine, Neurology, Tuberculosis and Orthopedic Surgery. Dr. Ernst P. Boas, Medical Director.

MOUNT SINAI HOSPITAL, Fifth Ave. and 100th St., New York City.—Courses in Internal Medicine, Pediatrics, Surgery, Gynecology, Dietetics, Dermatology, Neurology, Psychiatry, Ophthalmology, Otology and Surgical Pathology. Write to the Secretary for Medical Instruction, 1 E. 100th St.

NEW HAVEN HOSPITAL, 330 Cedar St., New Haven, Conn.—Special Residencies in Gynecology, Medicine and Obstetrics. Mr. Albert W. Buck, Superintendent.

NEW YORK EYE AND EAR INFIRMARY, Second Ave., Coroner 13th St., New York City.—Special Residencies in Ophthalmology and Otology. Mr. Thomas K. Robertson, Superintendent.

NEW YORK POST-GRADUATE HOSPITAL, Second Ave. and Twentieth St., New York City.—Special Internships and General Practice Courses. Dr. William D. Cutter, Medical Director.

NEW YORK SKIN AND CANCER HOSPITAL, 2d Ave. and 19th St., New York City.—Courses for General Practitioners. Miss Sara Burns, R.N., Superintendent.

NEW YORK SOCIETY FOR THE RELIEF OF THE RUPTURED AND CRIPPLED, 321 East 42d St., New York City.—Special Courses in Orthopedic Surgery. Dr. Joseph D. Flick, Superintendent.

PENNSYLVANIA HOSPITAL, 4401 Market St., Philadelphia.—Courses in Neurology and Psychiatry. Dr. Earl D. Bond, Physician in Chief.

PETER BENT BRIGHAM HOSPITAL, 721 Huntington Ave., Boston.—Special Courses in Medicine, Surgery, Pathology and Roentgenology. Dr. J. B. Howland, Superintendent.

PROVIDENCE CITY HOSPITAL, Eaton St., Providence, Rhode Island.—Courses in Contagious Diseases. Dr. D. L. Richardson, Medical Superintendent.

SOUTHERN PACIFIC HOSPITAL, Bishop and Thomas Sts., Houston, Texas.—Residencies in Surgery. Dr. R. W. Knox, Chief Surgeon.

SOUTH VIEW HOSPITAL, 18th Ave. and Mitchell St., Milwaukee.—Courses in Contagious Diseases. Dr. M. R. French, Medical Superintendent.

STATE HOSPITAL FOR MENTAL DISEASES, Howard, Rhode Island.—Courses in Neurology. Dr. Arthur H. Harrington, Medical Superintendent.

ST. ELIZABETH'S HOSPITAL, Claremont and LeMoyne Sts., Chicago.—Summer Courses in Clinical Medicine. Sister M. Cordula, Superintendent.

ST. FRANCIS HOSPITAL, Bush and Hyde St., San Francisco, Calif.—Residencies in General Practice. Dr. John W. Ramsey, Medical Director.

ST. LOUIS CHILDREN'S HOSPITAL, 500 S. Kingshighway, St. Louis.—Residencies in Pediatrics. Dr. L. H. Burlingham, Administrator.

ST. MARY'S, COLONIAL, KAHLER, WORRELL AND DAMON HOSPITALS, Rochester, Minn.—Services in these hospitals form part of the Fellowships in the University of Minnesota Graduate Medical School. See. Jr. A. M. A., April 16, 1924, pp. 520.

WILLS HOSPITAL, Philadelphia.—Residencies, 16 Months, in Ophthalmology. Mr. Stephen Wierzbichi, Superintendent.

Paris.—INTERNATIONAL CLINICS OF OTO-RHINO-LARYNGOLOGY AND FACIO-MAXILLARY SURGERY, St. Louis Hospital, Paris, France.—Courses in Oto-Rhino-Laryngology and Surgery. Applications or inquiries may be addressed to Dr. J. Eastman Sheehan, 636 Fifth Ave., New York.

Porto Rico.—PRESBYTERIAN HOSPITAL, San Juan.—Courses in Tropical Medicine. Dr. Garry R. Burke, Associate Medical Director.

Future Additions to the Approved Lists

Hospitals that want to be accredited for interns and also those special or general hospitals which provide residencies or advanced internships in specialties are invited to make application to be included in the appropriate list. Approval of residencies in specialties is extended to only those hospitals that require a general internship for admission to the residencies. The requirements for approval under either list are available in pamphlet form.

A PRACTICAL PLAN FOR CHECKING AND RECORDING THE WORK OF INTERNS

With the increasing importance of the fifth, or intern, year in hospitals there is a demand for some practical scheme for recording and checking the work of the interns to insure that they go through a sufficient amount and variety of medical and surgical procedures.

The scheme that is described here is one that is in use by the Leland Stanford University in checking the work of the interns. It consists of a list of the procedures required to be performed by the interns in the course of their internship in the Lane Hospital, San Francisco, and also cards similar to the one illustrated in this article. "The outline of procedure does not include the ordinary work-up and therapy of the intern's cases, but consists of procedures which were found from questioning recent graduates to be most useful in starting general practice. The outlining of these practical points in therapy not only helps the intern to make a living in competition with the older practitioners, but, in addition,

MEDICINE
PEDIATRICS

INTERNS

PROCEDURES	Baker	Beede	Custer	Dailing	Evans	Gosby	Haupt	Page	Struble
Gavage & Lavage									
Intermuscular Injections									
Intravenous Injections									
Spinal Puncture									
Skin Tests									
Hypodermoclysis									
Bladder Catheterization									
Infant Feeding									

Card for checking work of interns in the required procedures.

checks his work in the hospital so that the essential points are not overlooked in the hurry of a big service. This makes the institution realize that the intern has certain things to learn and that it is the duty of the organization to see that he ges them."

PROCEDURES REQUIRED TO BE PERFORMED BY STUDENT INTERNS IN THE COURSE OF THEIR ROTATING INTERNSHIP AT THE LANE HOSPITAL, SAN FRANCISCO

A. Medicine:
- 1. Enemas—colonic flushes—proctoclysis:
  - Thoracentesis.
  - Intravenous injections.
  - Transfusions.
  - Removing stomach contents, washing stomach.
  - Laboratory work.
  - Vaccinations.
- 2. Neurology and psychiatry:
  - Nasal feeding.
  - Packs.
  - Lumbar puncture.
  - Intraspinal treatments.
- 3. Pediatrics:
  - Technic of nasal and mouth gavage and lavage.
  - Intramuscular injections.
  - Intravenous injections.
  - Intraperitoneal injections.
  - Spinal punctures.
  - Skin tests—tuberculin and Schick and protein test.
  - Hypodermoclysis.
  - Bladder catheterization of infants and children.
  - Infant feeding—normal and pathologic.

B. Surgery:
- 1. Minor surgery:
  - Boils.
  - Carbuncles.
  - Sebaceous cysts.
  - Felons.
  - Paronychiae.
  - Fractures (under supervision).
  - Herniotomy.
  - Appendectomy.
  - Hemorrhoidectomy.
  - Anesthetics.
- 2. Orthopedics:
  - Plaster dressings.
  - Splints.
  - Physiotherapy.
  - Heat.
    - Baking.
  - Electricity.
    - Galvanism.
    - Faradism.
    - Sinusoidal current.
    - High frequency.
    - Static.
  - Hydrotherapy.
    - Douche—the Scotch douche.
    - Whirlpool baths.
    - Contrast baths.
    - Local compresses.
- 3. Genito-urinary:
  - Treatment of acute gonorrheal urethritis.
  - Treatment of chronic urethritis.
  - Anterior and posterior urethral and bladder.
  - Irrigations, passing sounds, prostatic massage.
  - Urethral calibration.
  - Passing catheters.
  - Adult circumcision.
- 4. Nose and throat:
  - Diagnostic puncture and washing antrum.
  - Control of nasal hemorrhage.
  - Tonsillectomy.
  - Adenoidectomy.
  - Paracentesis of membrana tympani.
- 5. Eye:
  - Treatment of conjunctivitis.
  - Treatment of trachoma.
  - Treatment of glaucoma.
  - Treatment of iridocyclitis.
  - Treatment of chalazion.
- 6. Gynecology and obstetrics:
  - Deliveries:
  - Perineorrhaphies.
  - Trachelorrhaphies.
  - Episiotomies.
  - Low forceps.
  - Circumcision of infants.
  - Curettages.
  - Closures.
  - Fitting pessaries.
  - Cauterization of Skene's glands.
  - Cauterization of cervices.
  - Patency test of tubes.
  - Packing a uterus for bleeding.
  - Anesthetics (obstetric gas).
  - Laparotomies—incisions.
  - Appendectomy.

The foregoing outline of procedures and the sample card are published, not as standards for universal adoption, but because it is believed that they are suggestive. Others who have worked out plans that they are using are invited to send in their suggestions to the Council on Medical Education and Hospitals.

REPORT ON CLINICAL LABORATORY SERVICE IN THE UNITED STATES

A. PRELIMINARY STEPS[1]

At the San Francisco session of the American Medical Association, June, 1923, the House of Delegates referred to the Bureau of Legal Medicine and Legislation, with power to act, a resolution authorizing the President to appoint a committee to confer with representatives of the American Chemical Society and the American Association of Pathologists and Bacteriologists, and to report one year later with recommendations. Subsequently, the House of Delegates, on the initiative of the Section on Pathology and Physiology, authorized the President to appoint a committee "to undertake an investigation of clinical laboratories with a view to securing a responsible and proper supervision of and adequate equipment and facilities for this branch of medical work." The President referred the matter to the Council on Medical Education and Hospitals, which appointed a special committee consisting of Dr. Louis B. Wilson, chairman, and Drs. Francis C. Wood, E. R. Stitt, C. P. Emerson and D. J. Davis. On the initiative of the Bureau of Legal Medicine and Legislation, the American Chemical Society appointed, as its committee, Dr. Julius Stieglitz, chairman, and Drs. C. L. Parsons and Charles H. LaWall, while the American Association of Pathologists and Bacteriologists appointed Dr. O. T. Schultz, chairman, and Drs. Arthur I. Kendall, D. J. Davis, J. P. Simonds and E. R. LeCount.

The three committees met jointly at the headquarters of the American Medical Association, March 6, 1924, with Dr. W. C. Woodward, secretary of the Bureau of Legal Medicine and Legislation, who was selected to act as chairman, and Dr. Paul N. Leech, director of the chemical laboratory, who acted as secretary without vote.

After a full discussion of those aspects of laboratory control of interest to the medical profession and to nonmedical men belonging to other professional groups, the joint committee defined the term "clinical laboratory," as used by the committee, as "an institution organized for the practical application of one or more of the fundamental sciences by the use of specialized apparatus, equipment and methods for the purpose of ascertaining the presence, progress and source of disease." Also it was the unanimous judgment of the joint committee that:

1. It should be illegal for any person not licensed by law so to do, to assume the responsibility of making the diagnosis or of deciding on the progress or source of disease on the basis of any results of a chemical, pathologic, serologic, bacteriologic, radiologic or microscopic observation or other laboratory examinations undertaken; and where laws do not now restrict diagnosis or the clinical interpretation of laboratory examinations to licensed classes of medical practitioners, laws should be enacted to effect that end.

2. Any law providing for the licensing of professional workers in laboratories devoted to ascertaining the presence, progress or source of disease should provide for the examination of members of each profession by competent authorities belonging to the same profession.

3. As long as an organization or individual engaged in examinations to ascertain the presence, source or progress of disease refrains from all diagnostic and prognostic interpretation of the results of such laboratory tests as provided for in paragraph 1, any effort to force such organization or individual to place itself under the direction of a representative of any other profession is to be deprecated.

4. The American Chemical Society, the American Medical Association and the American Association of Pathologists and Bacteriologists should cooperate to establish the principles enumerated in the foregoing resolution whenever legislation in this field may be proposed, and the cooperation of other national bodies should be solicited.

5. Clinical laboratories should be standardized in accordance with the principles laid down in the preceding paragraphs, and legislation should be enacted to insure competent personnel and suitable equipment.

Further, the joint committee decided that it was the sole province of the committee appointed by the American Medical Association to undertake the contemplated survey of clinical laboratories.

The report of the joint committee was approved by the council of the American Chemical Society and the council of the American Association of Pathologists and Bacteriologists, and on June 11, 1924, it was approved by the House of Delegates of the American Medical Association at the Chicago session. At the same session the committee of the American Medical Association, having been assigned the duty of making the survey, passed on to the Council on Medical Education and Hospitals the duty of making the survey, the replies to which were to be "properly analyzed and be made a part of the criteria for determining the standard of any list of approved laboratories, the making or publication of which the Council may recommend." The committee further recommended to the Council on Medical Education and Hospitals certain questions to be included in the survey, and those questions with others were incorporated in a brief but comprehensive questionnaire, which was drafted and submitted for suggestions to each member of the three committees named above and also to representatives of the American Association of Clinical Pathologists. With their additional questions and suggestions the questionnaire[2] was completed.

B. COOPERATION AND RESPONSE OF LABORATORIES

It also became apparent that it was advisable to confine the survey for the present to the laboratories that make a business of doing clinical work for physicians, omitting the hospital laboratories, of which there are 3,035, the public health laboratories, and the roentgen-ray and other highly specialized laboratories.

A personal letter explaining the origin and purpose of the survey was written to each of the 1,403 laboratories and concerns that were supposed to be laboratories, each letter accompanied by a questionnaire and a stamped return envelop. All that failed to answer were followed up at least twice with personally signed letters, and special appeals were also sent to them by various individuals and organizations which cooperated to secure as complete a return of the questionnaire as possible.

The Council received from the 1,403 laboratories on the mailing list a total of 1,080 replies. Eliminating nonclinical laboratories from among the 1,080, we have remaining 618 that do clinical work for physicians. Of these, there were 314 regular commercial clinical laboratories that answered practically all the questions, and those 314 complete reports were made the basis of the tabulation and of the report which follows. The incomplete reports, while not tabulated, nevertheless were useful for suggestions and data which they contained.

The greatest number of reports received from any one state was 55 from New York. Other states were as follows: Illinois, 32; California, 25; Texas, 21; Ohio, 16; Missouri, 14; Pennsylvania, 12. Among the 314 laboratories sending in complete reports, 198 are owned by individuals, 60 by partnership, and 56 are corporations. New York State reported 37 individually owned, 8 partnerships, and 10 corporations.

The answers regarding equipment were quite full, but probably the best idea of the equipment is gained from the types and amount of work that is done rather than the direct statements of the laboratories regarding their equipment (tables 1 and 2). From their reports on the kind and amount

1. The report of the preliminary steps, including reports of committees, is found in appendix A.

2. The full text of the questionnaire is given in appendix B.

of work done, we gather the following summary regarding equipment:

Number of Laboratories	Equipped For
117	Tissue pathology
243	Clinical pathology
285	Serologic work
296	Blood chemistry
300	Bacteriology
118	Research
86	Roentgen-ray diagnosis
45	Roentgen-ray therapy

DIRECTORS AND OTHER PERSONNEL

Under the heading of directors and other personnel, the 314 laboratories reported a total of 338 directors, of whom 265 have the M.D. degree, forty-nine have other degrees but not M.D., and twenty-four have no degree (table 1). Answers regarding personnel other than the directors accounted for a total of 774 persons, and among this subsidiary personnel were 155 physicians and 619 others.

KINDS AND AMOUNT OF WORK DONE

The kind or type of work and the amount done was reported in terms of the main kinds of work commonly done in the average complete clinical laboratory, and are shown in greater detail in table 2. The total number of tests accounted for by the 314 laboratories is 2,115,016 annually, distributed as follows:

Blood	238,873
Feces	43,993
Gastric	29,001
Spinal fluid	18,673
Sputum	81,017
Urine	843,924
Vaccines	23,054
Necropsies	2,319
Bacteriologic	201,842
Serologic	68,515
Pathologic	58,185
Blood chemistry	64,311
Basal metabolism	17,295
Electrocardiograph	2,182
Wassermann	323,589
Sensitization tests	20,459
Others	77,784
Total, 314 laboratories	2,115,016

Average, 6,736 per laboratory.

QUESTIONS RELATING TO TREATMENT AND DIAGNOSIS

In answer to the question, "Does the laboratory give any treatments?" 125 laboratories said that they do give treatments and 189 that they do not give treatments. As to the kinds of treatments, 48 answered they give intravenous treatments; 38, vaccine; 37, roentgen ray. Still other kinds of treatments are given by 43 laboratories.

TABLE 1.—*Organization, Equipment and Personnel of Clinical Laboratories*

	Organization			Equipment for								Directors			Assistants	
	Individual	Partnership	Corporation	Tissue Pathology	Clinical Pathology	Serologic	Blood Chemistry	Bacteriology	Research	Roentgen-Ray Diagnosis	Roentgen-Ray Therapy	M.D.'s	Other Degrees	No Degrees	M.D.'s	All Others
Alabama	2	..	..	2	2	2	2	2	1	1	1	1	..	1	..	1
Arizona	1	1	..	2	2	2	2	2	..	1	1	3	..	..	..	14
Arkansas	6	4	..	9	9	10	9	10	..	6	3	10	2	..	10	19
California	11	9	5	18	22	23	24	23	14	6	5	18	4	4	8	84
Colorado	1	1	1	2	3	2	2	2	2	1	..	4	..	..	5	7
Connecticut	..	..	1	..	..	..	1	1	..	1	..	1	..	..	..	3
Delaware	1	..	..	..	..	..	1	1	..	..	..	1	..	..	..	1
Florida	..	..	1	1	1	1	1	1	..	1	1	1	..	..	2	4
Georgia	2	1	1	3	3	3	3	2	1	3	2	4	..	..	4	8
Idaho	1	..	..	..	1	1	1	1	..	..	..	..	1	..	..	..
Illinois	20	3	9	18	24	28	27	30	9	9	3	30	2	4	18	58
Indiana	3	1	2	6	6	6	6	6	2	3	3	6	..	..	2	5
Iowa	2	1	1	2	3	2	4	4	..	..	..	..	4	..	..	3
Kansas	4	2	1	3	7	6	6	6	3	3	1	9	1	1	..	11
Kentucky	3	1	..	1	1	1	4	2	..	4	1	5	..	..	..	7
Louisiana	1	2	..	3	3	3	3	3	1	..	..	4	..	..	2	8
Maine	1	..	..	1	1	1	1	1	..	..	..	1	..	..	..	1
Maryland	6	1	..	..	4	7	7	6	2	..	..	9	..	..	2	10
Massachusetts	3	1	1	3	5	4	4	5	1	2	2	6	..	..	1	13
Michigan	6	..	4	4	7	9	9	10	2	1	1	9	1	..	5	20
Minnesota	2	3	2	4	7	7	7	7	4	5	3	6	1	..	3	17
Mississippi	1	2	..	2	3	3	3	3	1	2	..	4	..	..	2	6
Missouri	11	1	2	3	13	14	12	14	4	5	2	13	..	1	3	32
Montana	..	1	..	..	1	1	1	1	1	1	1	1	..	..	1	3
Nebraska	1	1	2	3	4	4	4	3	3	2	1	6	..	..	7	7
Nevada	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
New Hampshire	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
New Jersey	7	..	..	4	6	6	6	7	4	..	..	3	4	..	3	6
New Mexico	2	..	..	..	1	1	2	2	1	1	1	2	..	..	..	3
New York	37	8	10	15	41	52	55	53	26	6	4	38	15	3	22	101
North Carolina	..	..	1	..	1	1	1	1	1	1	..	1	..	..	..	4
North Dakota	..	..	1	1	1	1	1	1	1	1	1	1	..	..	2	4
Ohio	11	2	3	3	14	15	14	16	5	2	1	14	2	..	5	24
Oklahoma	5	2	..	..	5	6	7	7	1	2	..	6	..	1	2	10
Oregon	3	1	..	1	2	4	4	4	3	..	..	2	..	3	1	15
Pennsylvania	12	..	..	..	4	11	12	12	4	1	..	5	4	3	2	17
Rhode Island	2	..	..	..	1	2	2	2	..	..	..	1	1	..	..	2
South Carolina	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South Dakota	..	1	..	1	1	1	1	1	..	1	1	1	..	..	..	3
Tennessee	6	..	..	..	4	6	6	6	2	1	..	6	..	..	1	5
Texas	18	3	..	2	17	21	20	21	8	10	4	20	2	..	11	44
Utah	1	1	1	1	3	3	3	3	3	..	..	2	1	..	2	8
Vermont	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Virginia	1	..	1	..	..	1	2	2	1	..	..	1	..	1	2	2
Washington	2	5	2	2	7	9	9	9	4	..	..	5	3	1	4	18
West Virginia	1	..	..	..	..	1	1	1	0	..	..	..	1	..	..	2
Wisconsin	1	1	4	2	5	4	6	6	2	3	2	5	..	1	23	9
Wyoming	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals	198	60	56	117	243	285	296	300	118	86	45	265	49	24	155	619

The question "What are the rules relating to diagnosis and treatment?" was intentionally so worded as to make it impossible to answer with "yes" or "no" and to draw out original statements about their policies regarding diagnosis and treatment. This question was quite freely answered, and while the replies do not admit of tabulation, the following are characteristic:

All reports sent direct to physicians in writing.

Diagnosis is given only to physician referring the case. Treatment only of cases referred by physicians, and dosage carefully measured with Furstenau intensimeter.

No diagnoses given except when the reports of the findings constitute a diagnosis.

Interpretation of the results of examination is left to the physician in charge of the case.

Referred back to physician.

Reports sent direct to the doctor in charge of the case.

In some cases we suggest types of treatment.

Very similar to the question about rules relating to diagnosis and treatment are the questions: "What supervision

is there over the diagnoses and treatments?" and "Is diagnosis or treatment ever made by persons not licensed to practice medicine and not working under the immediate supervision of a licensed physician?" It was stated by four laboratories that diagnoses are made by unlicensed persons who were not supervised by a licensed physician, and by 310 laboratories that such diagnoses are not made.

Coming to the question as to what contract work is done, (*a*) for medical institutions, and (*b*) for nonmedical organizations, sixty laboratories do contract work for medical institutions and twenty-nine do contract work for nonmedical institutions; also twenty-nine stated that they do contract work for physicians. The terms of the contract were given in most of the cases, but they are not reducible to a statistical report.

RESEARCH WORK

The questionnaire asks whether the members of the staff of the laboratory are doing research work, and they are asked to state briefly the nature of this work. One hundred and thirty-six laboratories answered that research work is being carried on. Animal experimentation is being carried on in 111 laboratories.

The laboratories whose staff publish scientific papers reported that 305 such papers were put out last year.

PUBLICITY

Many of the laboratories, as requested, sent in the names of the papers, journals and periodicals in which advertisements were carried last year, and also mentioned other means of publicity that were employed. They also sent in copies

TABLE 2.—*Kinds and Number of Tests Made by Clinical Laboratories During the Past Fiscal Year*

	Blood	Feces	Gastric	Spinal Fluid	Sputum	Urine	Vaccines	Necropsies	Bacteriologic	Serologic	Pathologic	Blood Chemistry	Basal Metabolism	Electrocardiograph	Wassermann	Sensitization Tests	Others
Alabama	3,100	135	12	60	3,600	1,525	200	15	1,075	200	200	50	...	475	1,000	625	5,500
Arizona	3,300	262	185	171	2,585	11,134	315	35	3,760	410	671	372	154	...	4,927	50	2,525
Arkansas	13,029	2,024	1,081	281	3,400	12,279	631	31	6,565	2,774	708	781	718	...	3,738	200	2,715
California	22,432	4,625	776	1,730	3,809	45,385	1,306	377	11,379	5,928	9,385	4,583	2,084	600	35,266	387	7,860
Colorado	3,400	55	70	415	900	8,400	300	35	3,250	30	1,500	300	100	...	1,800	80	.....
Connecticut	562	68	15	2	135	915	5	...	95	.....	.....	204	13	...	332	700	270
Delaware	150	10	200	.....	100	2,000	25	...	200	.....	.....	.....	...	...	.....	...	.....
Florida	822	83	65	11	61	1,273	50	...	279	61	84	206	12	...	452	...	1,000
Georgia	5,150	1,150	200	250	800	5,650	700	...	1,700	3,500	800	1,050	900	...	3,150	100	300
Idaho	500	20	10	10	25	1,000	10	...	1,000	50	.....	10	.....	...	500	20	.....
Illinois	9,204	3,869	2,151	1,479	3,415	34,507	1,485	124	10,014	6,023	2,791	2,590	945	...	26,706	560	11,280
Indiana	1,400	915	795	160	1,800	6,100	775	50	3,000	1,100	750	450	570	...	6,800	110	200
Iowa	2,750	423	237	81	176	9,325	110	15	2,137	400	125	591	102	...	300	100	.....
Kansas	6,750	400	315	130	820	13,000	330	55	4,800	200	2,070	2,175	890	100	6,150	150	1,000
Kentucky	3,904	285	847	34	210	8,614	275	63	585	.....	2,437	2,020	652	...	1,636	160	1,125
Louisiana	3,781	623	136	173	397	6,909	670	4	2,720	51	896	948	217	...	2,691	113	1,465
Maine	400	100	30	90	160	530	70	...	200	.....	200	120	80	...	600	24	.....
Maryland	1,425	424	364	234	335	2,215	40	325	506	150	100	667	150	200	1,849	10	48
Massachusetts	917	330	79	49	234	8,778	442	...	1,242	431	221	331	30	...	861	104	291
Michigan	2,771	548	425	419	5,150	8,303	469	116	3,918	6,861	2,389	626	224	...	9,323	62	1,888
Minnesota	13,100	1,210	3,000	225	1,540	35,780	320	30	7,800	1,125	1,755	3,255	3,550	...	4,800	200	1,650
Mississippi	4,453	1,301	254	97	697	11,677	187	7	2,198	1,071	1,016	745	146	7	3,208	83	51
Missouri	12,292	893	914	1,086	1,579	19,895	1,300	146	6,087	9,997	5,055	3,561	520	...	25,772	325	3,719
Montana	5,000	50	12	75	300	5,000	500	12	1,500	100	500	300	75	...	1,500	300	100
Nebraska	6,900	600	500	260	355	12,000	185	32	1,165	150	2,250	550	75	...	5,150	2,530	.....
Nevada	.....	.....	.....	.....	.....	.....	.....	...	.....	.....	.....	.....	.....	...	.....	.....	.....
New Hampshire	.....	.....	.....	.....	.....	.....	.....	...	.....	.....	.....	.....	.....	...	.....	.....	.....
New Jersey	1,226	151	79	91	326	16,288	204	...	2,698	168	112	1,376	7	...	1,209	47	516
New Mexico	474	47	100	67	386	1,500	112	8	965	60	175	191	95	...	1,500	115	.....
New York	31,469	6,994	5,903	3,205	19,941	327,314	5,761	211	48,227	6,802	7,401	18,833	1,104	100	63,105	845	9,446
North Carolina	1,350	19	.....	40	22	3,651	37	12	2,093	205	175	205	.....	...	1,469	356	1,205
North Dakota	300	50	400	50	175	9,000	25	...	200	.....	100	700	300	...	200	10	.....
Ohio	16,349	5,519	2,582	1,166	3,211	58,666	1,089	69	6,083	3,885	3,186	5,350	881	300	25,008	370	13,515
Oklahoma	6,350	750	1,119	617	2,019	12,480	305	2	2,975	370	685	555	49	...	7,480	57	3,100
Oregon	6,175	4,305	700	1,400	13,150	35,175	600	20	22,200	2,800	2,000	900	500	...	27,500	1,700	.....
Pennsylvania	4,159	768	251	140	662	11,243	496	24	3,619	474	538	988	4	....	2,370	30	626
Rhode Island	254	47	24	41	29	520	43	...	38	16	6	96	10	...	83	.....	53
South Carolina	.....	.....	.....	.....	.....	.....	.....	...	.....	.....	.....	.....	.....	...	.....	.....	.....
South Dakota	3,400	40	75	60	100	7,000	30	38	360	160	125	130	500	...	600	.....	.....
Tennessee	3,482	800	401	855	601	9,772	167	42	1,723	1,776	1,432	824	267	...	4,460	132	.....
Texas	21,556	2,512	2,355	1,633	4,425	35,488	1,221	50	9,200	7,554	2,151	2,294	699	...	17,599	1,481	4,136
Utah	1,434	89	158	233	270	1,214	192	67	.....	.....	.....	.....	.....	...	.....	.....	.....
Vermont	.....	.....	.....	.....	.....	.....	.....	...	500	.....	.....	2,025	250	400	2,000	.....	106
Virginia	1,860	135	1,025	55	125	2,500	175	...	3,699	1,768	260	576	55	...	3,438	2,261	174
Washington	8,534	628	629	773	2,444	31,180	1,792	127	11,084	842	3,422	2,353	292	...	14,840	5,963	820
West Virginia	60	10	5	15	25	500	50	...	5,000	400	.....	25	.....	...	400	.....	500
Wisconsin	2,959	466	412	250	533	9,039	145	175	1,573	.....	415	425	75	...	1,607	50	.....
Wyoming	.....	.....	.....	.....	.....	.....	.....	...	.....	.....	.....	.....	.....	...	.....	.....	.....
Totals	238,873	43,903	29,001	18,673	81,017	843,924	23,054	2,319	201,842	68,515	58,185	64,311	17,295	2,182	323,589	20,459	77,784

On the question as to whether the laboratory conducts a keep-well service for the laity, twenty-seven answered that they do conduct such a service and 287 that they do not.

SOURCE OF PATRONAGE

It was reported by 242 of the 314 laboratories that all their work is received through physicians, while seventy-two stated that they received work both through physicians and direct from patients. The reports on tests are mailed direct to the physicians only, by 279 laboratories and thirty-five say that they do not mail all reports direct to physicians.

Ninety-eight laboratories report that physicians connected with the laboratory have a medical practice of their own, and 217 laboratories answered the same question in the negative.

RELATION WITH OTHER INSTITUTIONS

Two hundred and twenty-six laboratories do work for hospitals, and sixty-eight of them do work for other institutions, such as clinics. One hundred and six do some public health work for city, state or federal government.

of their fee lists, form letters, blotters, prospectuses, and clippings of advertisements carried during the year. The medical journals are used by 169, while only nineteen stated that they advertise in nonmedical papers. Form letters are employed by seventy laboratories.

C. PREPARATION OF A SET OF STANDARDS

As soon as the tabulation of questionnaires was completed, a digest was prepared which included the tables and other data contained in this article. A preliminary draft of the "Essentials of an Approved Clinical Laboratory" * was made, the report of the joint committee being used as a basis, containing also ideas growing out of the survey and the resulting correspondence.

Copies of the digest of survey and of the preliminary draft of the "Essentials" were submitted to all members of committees and representatives of all agencies participating in the survey and to representatives of interested organizations

* The text of the preliminary draft of the "Essentials" will be found on pages 1068 and 1069.

and members of the Council on Medical Education and Hospitals, for their criticism and suggestions. Through correspondence and conferences with the parties concerned, all the various principles and standards suggested have been fully discussed, and the principles and standards set forth in the accompanying paragraphs under the heading of "Essentials of an Approved Clinical Laboratory" have been agreed on.

ESSENTIALS OF AN APPROVED CLINICAL LABORATORY

DEFINITION

A clinical pathologic laboratory is an institution organized for the practical application of one or more of the fundamental sciences by the use of specialized apparatus, equipment and methods, for the purpose of ascertaining the presence, nature, source and progress of disease in the human body.

Only those clinical laboratories in which the space, equipment, finances, management, personnel and records are such as will insure honest, efficient and accurate work may expect to be listed as approved.

LOCATION, HOUSING AND EQUIPMENT

The housing and light should be adequate for the proper functioning of the laboratory. The equipment should be sufficient to permit all essential technical procedures to be properly carried out.

SCOPE

A general clinical laboratory should be prepared to render the following services:

(*a*) Hematologic: Blood counts, blood grouping and coagulation tests, and tests for blood parasites in general.

(*b*) Biochemical: Qualitative and quantitative analyses of urine, blood, gastric contents, body fluids, feces, intestinal contents and cerebrospinal fluids; renal and hepatic function tests and basal metabolism.

(*c*) Bacteriologic: Bacteriologic diagnoses; preparation of vaccines and blood and body fluid cultures.

(*d*) Serologic: Serologic diagnoses; agglutination, complement fixation, or precipitin and lysis tests.

(*e*) Pathologic: Preparation of paraffin, celloidin or frozen sections, microscopic and gross pathologic specimens and necropsies.

(*f*) Parasitologic: Protozoal and zoological diagnoses.

PERSONNEL

(*a*) *The Director.*—The director of an approved clinical laboratory in which diagnoses and prognoses are made must be a graduate of an acceptable medical college, who is in reputable standing as a physician, has specialized in clinical pathology for at least three years, is reasonably familiar with the manifestations of disease in the patient, and knows laboratory work sufficiently well to direct and supervise technical procedures and to recognize the clinical value of laboratory reports. In brief, the director of a clinical laboratory should be sufficiently qualified to receive the same recognition as other specialists in medicine. He should be on full time or have definite hours of attendance sufficient to insure proper supervision of the laboratory work.

In laboratories in which clinical tests are carried out without any attempt to make diagnostic or prognostic interpretations and laboratories in which the tests are made for physicians who will make their own diagnoses and prognoses, the director may be a doctor of public health or a doctor of philosophy who has specialized in bacteriology, pathology,

TABLE 3.—*Treatments, Diagnoses and Contract Work by Clinical Laboratories*

	Laboratories Giving Treatments		Kinds of Treatments				Diagnosis by Unlicensed Persons		Laboratories Doing Contract Work: For Medical Concerns		For Nonmedical Concerns		Contract Work Done for Physicians	
	Yes	No	Intravenous	Vaccine	Roentgen Ray	Others	Yes	No	Yes	No	Yes	No	Yes	No
Alabama	1	1	..	..	..	1	..	2	..	2	..	2	..	2
Arizona	2	..	1	..	1	..	..	2	1	1	..	2	1	1
Arkansas	5	5	..	..	4	1	..	10	1	9	1	9	1	9
California	7	18	2	2	2	5	2	23	6	19	2	23	3	22
Colorado	3	..	1	..	1	1	..	3	1	2	..	3	..	3
Connecticut	1	..	..	1	..	1	..	1	..	1	..	1	..	1
Delaware	..	1	..	..	..	..	..	1	..	1	..	1	..	1
Florida	1	..	..	1	1	1	..	1	..	1	..	1	..	1
Georgia	4	..	..	..	..	4	..	4	1	3	..	4	1	3
Idaho	1	..	1	1	..	..	..	1	1	..	..	1	1	..
Illinois	13	19	9	3	3	1	..	32	7	25	4	28	3	29
Indiana	4	2	1	1	2	2	..	6	1	5	..	6	2	4
Iowa	..	4	..	..	..	..	..	4	..	4	..	4	..	4
Kansas	1	6	1	1	..	1	..	7	2	5	1	6	..	7
Kentucky	2	2	..	1	1	..	..	4	1	3	..	4	..	4
Louisiana	3	..	..	1	..	3	..	3	1	2	1	2	..	3
Maine	..	1	..	..	..	..	..	1	..	1	..	1	..	1
Maryland	4	3	4	1	1	2	..	7	..	7	..	7	..	7
Massachusetts	3	2	..	2	..	2	..	5	..	5	..	5	..	5
Michigan	4	6	4	1	1	..	..	10	5	5	1	9	..	10
Minnesota	3	4	..	..	3	1	..	7	..	7	1	6	..	7
Mississippi	1	2	..	1	..	..	..	3	1	2	..	3	..	3
Missouri	12	2	5	2	2	3	..	14	..	14	3	11	..	14
Montana	1	..	1	..	1	..	..	1	1	..	..	1	..	1
Nebraska	3	1	..	..	1	1	..	4	1	3	..	4	1	3
Nevada	..	..	..	..	..	..	..	..	..	..	..	..	..	..
New Hampshire	..	..	..	..	..	..	..	..	..	..	..	..	..	..
New Jersey	1	6	1	..	..	..	..	7	..	7	..	7	..	7
New Mexico	1	1	1	..	..	..	..	2	..	2	..	2	..	2
New York	9	46	4	2	3	1	..	55	4	51	3	52	1	54
North Carolina	1	..	..	..	..	1	..	1	..	1	..	1	..	1
North Dakota	1	..	..	..	1	..	..	1	..	1	..	1	..	1
Ohio	8	8	3	4	1	3	1	15	2	14	3	13	4	12
Oklahoma	4	3	1	2	1	1	..	7	2	5	..	7	1	6
Oregon	1	3	..	1	..	..	..	4	..	4	..	4	1	3
Pennsylvania	1	11	1	1	..	1	..	12	1	11	1	11	1	11
Rhode Island	..	2	..	..	..	..	..	2	..	2	..	2	..	2
South Carolina	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South Dakota	1	..	..	..	1	..	..	1	..	1	..	1	..	1
Tennessee	1	5	1	1	..	1	..	6	..	6	..	6	..	6
Texas	13	8	3	7	6	4	..	21	10	11	6	15	5	16
Utah	..	3	..	..	..	..	..	3	..	3	..	3	..	3
Vermont	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Virginia	..	2	..	..	..	..	..	2	2	..	..	2	1	1
Washington	2	7	2	1	..	..	1	8	4	5	1	8	..	9
West Virginia	..	1	..	..	..	..	..	1	..	1	..	1	..	1
Wisconsin	2	4	1	..	..	1	..	6	4	2	1	5	2	4
Wyoming	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals	125	189	48	38	37	43	4	310	60	254	29	285	29	285

biochemistry or other allied subjects and who must be a person in good standing in his profession. In the latter institutions, however, there shall be also one member of the clinical staff who shall be charged with the duty of assisting physicians in the interpretation of the results of laboratory examinations, and this member of the staff must be a licensed graduate in medicine who has specialized in clinical pathology for at least three years and who is devoting the major part of his time to this work. The name of the director and—where the director is not a physician—of the staff physician also must appear on all reports and printed matter issued by the laboratory.

(*b*) *Assistants.*—The director should have a corps of assistants and technicians, responsible to him, and for whom he is responsible, to carry out promptly, intelligently and accurately the several kinds of service the laboratory offers. All their reports, not only of tissues but also of all bacteriologic, hematologic, biochemical, serologic and pathologic data, should be made to the director.

REPORTS

The approved clinical laboratory should make its reports through the director, if a physician; otherwise, through its staff physician, who should furnish advice concerning these reports and their diagnostic significance solely to the physician in charge of the patient. All blanks for reports and other documents should have the name of the director printed on them, and, if the director is not a physician, of the staff physician also.

RECORDS

Full records of all examinations made by the laboratory, suitably indexed and filed, are essential. Every specimen analyzed in the laboratory should be given a serial number, which should follow that specimen in the records and reports. When the laboratory report concerns a hospital patient, an exact transcript of the laboratory record should be appended to the hospital case record. Each specimen submitted to the laboratory should have appended pertinent clinical data.

LIBRARY

The laboratory should be provided with, or have convenient access to, a library including current scientific books and journals on all the various subjects required in its work.

FEES

There should be no dividing of fees or rebating between the laboratory or its director and any physician, corporate body or group.

TABLE 4.—*Sources of Patronage, Research Work and Advertising Methods of Laboratories*

	Conduct Keep-Well Service for Laity		Work Received Through Physicians or Patients		Report to Physicians Only		Do Physicians of Laboratory Have Medical Practice?		Do Public Health Work		Do Research Work		Animal Experimentation		No. of Papers Published Last Year	Advertise in Papers		Use Form Letters
	Yes	No	Phys.	Both	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No		Medical	Non-medical	
Alabama	..	2	1	1	2	..	1	1	..	2	1	1	..	2	..	1	..	..
Arizona	..	2	2	..	2	..	..	2	2	..	2	..	1	1	4	..	..	1
Arkansas	2	8	7	3	10	..	3	7	2	8	4	6	4	6	3	8	..	4
California	1	24	20	5	23	2	3	23	13	12	14	11	15	10	36	15	2	8
Colorado	..	3	3	..	3	..	1	2	1	2	2	1	2	1	6	..	..	1
Connecticut	..	1	1	..	..	1	..	1	1	..	..	1	1	..	..	..	..	..
Delaware	1	..	..	1	..	1	..	1	..	1	1	..	..	1	..	..	..	..
Florida	..	1	1	..	1	..	..	1	1	..	..	1	..	1	2	1	..	..
Georgia	..	4	..	4	3	1	4	..	1	3	1	3	1	3	3	7	..	..
Idaho	..	1	1	..	1	..	..	1	1	..	..	1	..	1	..	..	..	..
Illinois	4	28	29	3	31	1	16	16	10	22	11	21	14	18	9	28	9	14
Indiana	2	4	3	3	5	1	..	6	3	3	2	4	1	5	2	7	..	2
Iowa	..	4	4	..	4	..	1	3	3	1	..	4	1	3	..	3	..	2
Kansas	..	7	5	2	6	1	4	3	3	4	3	4	2	5	20	4	..	3
Kentucky	..	4	1	3	4	..	2	2	1	3	1	3	..	4	11	..	..	1
Louisiana	..	3	2	1	3	..	1	2	2	1	2	1	2	1	4	1	..	1
Maine	..	1	..	1	1	..	..	1	..	1	1	..	..	1	..	..	..	..
Maryland	1	6	5	2	6	1	4	3	1	6	3	4	1	6	5	..	..	..
Massachusetts	1	4	3	2	2	3	3	2	2	3	1	4	2	3	1	..	2	1
Michigan	..	10	8	2	10	..	3	7	5	5	2	8	1	9	3	8	..	3
Minnesota	1	6	7	..	7	..	1	6	1	6	4	3	2	5	2	4	..	2
Mississippi	1	2	2	1	2	1	2	1	1	2	1	2	3	..	3	2	..	..
Missouri	1	13	13	1	13	1	3	11	1	13	4	10	5	9	4	8	..	2
Montana	..	1	1	..	1	..	..	1	1	..	1	..	1	..	..	..	..	..
Nebraska	..	4	2	2	3	1	2	2	1	3	3	1	2	2	17	5	..	1
Nevada	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
New Hampshire	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
New Jersey	..	7	6	1	6	1	3	4	4	3	4	3	1	6	1	3	..	2
New Mexico	..	2	2	..	2	..	1	1	1	1	1	1	1	1	..	..	..	..
New York	..	55	48	7	52	3	16	39	9	46	26	29	14	41	17	15	1	11
North Carolina	1	..	1	..	1	..	..	1	1	..	1	..	1	..	3	..	..	..
North Dakota	..	1	1	..	1	..	1	..	..	1	1	..	1	..	..	..	..	..
Ohio	5	11	11	5	13	3	9	7	5	11	7	9	4	12	89	5	..	1
Oklahoma	..	7	2	5	6	1	1	6	2	5	2	5	1	6	2	6	1	1
Oregon	..	4	2	2	3	1	..	4	2	2	3	1	3	1	2	4	1	..
Pennsylvania	1	11	10	2	11	1	3	9	4	8	4	8	6	6	7	6	..	1
Rhode Island	..	2	2	..	1	1	1	1	..	2	..	2	..	2	..	1	..	..
South Carolina	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South Dakota	1	..	..	1	1	..	..	1	1	..	..	1	..	1	2	..	..	1
Tennessee	1	5	5	1	6	..	..	6	..	6	2	4	2	4	..	..	..	..
Texas	2	19	12	9	12	9	3	18	8	13	9	12	5	16	27	18	3	3
Utah	..	3	3	..	3	..	2	1	..	3	3	..	3	..	2	..	..	1
Vermont	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Virginia	..	2	2	..	2	..	2	..	1	1	1	1	1	1	..	..	..	..
Washington	..	9	7	2	9	..	1	8	7	2	6	3	3	6	18	7	..	1
West Virginia	1	..	1	..	1	..	..	1	1	..	..	1	1	..	..	..	..	1
Wisconsin	..	6	6	..	6	..	1	5	3	3	2	4	3	3	..	2	..	1
Wyoming	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals	27	287	242	72	279	35	98	217	106	208	136	178	111	203	305	109	19	70

PUBLICITY

Publicity of an approved clinical laboratory should be in professional good taste and be limited to statements of fact, as the name, address and telephone number of the laboratory; names and titles of the director and other active responsible personnel; fields of work covered; office hours; directions for sending specimens, etc., and should not contain misleading statements or claims of unusual superiority. It should not advocate medical fads nor lay undue stress on the importance of laboratory findings.

Only the names of those rendering regular service to the laboratory should appear on letterheads, or any other form of publicity as being connected with the laboratory.

Advertising matter should be directed only to physicians either through bulletins or through recognized technical journals, and never to the nonprofessional public, as, for example, by announcements in popular journals and periodicals, circulars, pamphlets, telephone lists or other means.

PROVISIONAL LIST OF CLINICAL LABORATORIES

The following list of laboratories is compiled from the large number reported which, so far as the questionnaires show, fulfil the "Essentials of an Approved Clinical Laboratory"* as prepared by the committee. Undoubtedly, many laboratories that would prove acceptable if questionnaires were answered would come under this list, and at the same time there are some on the list that, on further revision, may have to be omitted.

ALABAMA

Dr. Andrew L. Glaze's Laboratory of Cutaneous and Clinical Medicine, 503 Empire Building, Birmingham.

ARIZONA

Goss Laboratory, H. L. Goss, M.D., Director, 125 W. Monroe Street, Phoenix.
Pathological Laboratory, Warner Watkins, M.D., and Harlan P. Mills, M.D., Directors, 320 Goodrich Building, Phoenix.
Tucson Clinical Laboratory, P. B. Newcomb, M.D., Director, 20 E. Ochoa Street, Tucson.

ARKANSAS

Cooper Clinic, Pathological and X-Ray Laboratory, A. A. Blair, M.D., Director, Cooper Clinic Building, Fort Smith.
Holt Clinic, X-Ray and Pathological Laboratory, John H. Harvey, M.D., Director, 1018½ Garrison, Fort Smith.
The Central Clinical and Pathological Laboratories, S. F. Hoge, M.D., and D. T. Hyatt, M.D., Directors, 322-323 Hall Building, Little Rock.
McGill Clinic, A. G. McGill, M.D., Director, 219 Exchange Bank Building, Little Rock.
Drs. Rhinehart and Rhinehart's Laboratory, D. A. Rhinehart, M.D., Director, 503 Donaghey Building, Little Rock.
Dr. W. G. Pittman's Laboratories, 216 Citizens Bank Building, Pine Bluff.

CALIFORNIA

Dr. John N. Chain's Clinical Laboratory, 350 "E" Street, Eureka.
Laboratory of Drs. W. V. Brem, A. H. Zeiler and R. W. Hammack, 1003 Pacific Mutual Building, Los Angeles.
Drs. H. E. Butka and O. B. Pratt's Clinical Laboratory, 1052 West Sixth Street, Los Angeles.
Grover and Campbell Laboratory, Arthur L. Grover, M.D., Director, 405 S. Hill Street, Los Angeles.
The Hollywood Biological and X-Ray Laboratories, Albert T. Martin, M.D., Director, 6331 Hollywood Boulevard, Los Angeles.
Hollywood Clinical Laboratory, Ernest H. Ruediger, M.D., Director, 1680 N. Vine Street, Los Angeles.
Moore-White Clinic, Robert Hill, M.D., Director, 511 S. Bonnie Brae, Los Angeles.
The Western Laboratories, Gertrude Moore, M.D., Director, 2404 Broadway, Oakland.
Pasadena Clinical Laboratory, Gustav F. Ruediger, M.D., Director, Citizens Savings Bank Building, Pasadena.
Dr. Rawson Pickard's Clinical Laboratory, 520 East Street, San Diego.
Oliver-Knapp Clinical Laboratories, Harry R. Oliver, M.D., Director, 870 Market Street, San Francisco.
Drs. B. C. N. O'Reilly and J. Hugh Wheeler's Laboratory, 1001-1003 Flood Building, San Francisco.
Pacific Wassermann Laboratories, Z. E. Bolin, M.D., Director, 928 Flood Building, San Francisco.
Practitioners' Laboratories, Ernst A. Victors, M.D., Director, 133 Geary Street, San Francisco.
Dr. Harry Spiro's Laboratory, Flood Building, San Francisco.
Dr. C. D. Holliger's X-Ray and Pathological Laboratories, Commercial and Savings Bank Building, Stockton.

COLORADO

Drs. W. Burdick and C. H. Elliott's Laboratory, Metropolitan Building, Denver.
Clinical Laboratory, Philip Hill-Kowitz, M.D., and Harry Gauss, M.D., Directors, 236 Metropolitan Building, Denver.

FLORIDA

The Miami Diagnostic Laboratories, I. C. Youmans, M.D., Director, 701 Professional Building, Miami.

ILLINOIS

Chicago Laboratory, Ralph W. Webster, M.D., Director, 25 E. Washington Street, Chicago.
Lincoln-Gardner Laboratory, Mary C. Lincoln, M.D., and Stella M. Gardner, M.D., Directors, 30 N. Michigan Avenue, Chicago.
Dr. M. M. Matthies Laboratory, Inc., 5 N. Wabash Avenue, Chicago.
Medical Research Laboratories, B. Gruskin, M.D., Director, 25 E. Washington Street, Chicago.
The Murphy Laboratories, L. J. Murphy, M.D., Director, 4750 Sheridan Road, Chicago.
National Pathological Laboratories, Inc., J. J. Moore, M.D., Director, 5 S. Wabash Avenue, Chicago.
Dr. Homer K. Nicoll's Laboratory, 122 S. Michigan Avenue, Chicago.
Quincy Clinical Laboratory, Frank Cohen, M.D., Director, Majestic Building, Quincy.
Rockford Laboratories for Medical Research, John R. Porter, M.D., Director, 418 William Brown Building, Rockford.

INDIANA

Fort Wayne Medical Laboratory, B. W. Rhamy, M.D., Director, 327 W. Berry Street, Fort Wayne.
The Physicians Laboratory, Inc., August O. Truelove, M.D., Director, 434 W. Berry Street, Fort Wayne.
Indianapolis X-Ray and Clinical Laboratories, W. E. Pennington, M.D., and W. H. Foreman, M.D., Directors, 604 Medical Arts Building, Indianapolis.
The Laboratory for Clinical Diagnosis, Harry K. Langdon, M.D., Director, 404 Hume-Mansur Building, Indianapolis.

KANSAS

Dr. J. L. Lattimore's Laboratories, 618 Mills Building, Topeka.

KENTUCKY

Dr. C. C. Turner's Laboratory, John Lewis Building, Glasgow.
Lexington Clinical Laboratory, E. S. Maxwell, M.D., Director, 190 N. Upper Street, Lexington.

LOUISIANA

Dr. L. A. Hebert's Clinical Laboratory, Pujo Street, Lake Charles.
The Biochemical Laboratory, Upton Giles, M.D., Director, 3501 Prytania Street, New Orleans.
Drs. F. G. Ellis and W. P. Butler's Laboratory, 941 Margaret Place, Shreveport.

MAINE

Dr. Mortimer Warren's Laboratory, 131 State Street, Portland.

MARYLAND

Clinical Laboratory of Dr. Howard J. Maldeis, 605 Park Avenue, Baltimore.
Clinical Laboratory of Dr. Charles E. Simon, 1734 Linden Avenue, Baltimore.
Drs. Paul W. Clough and Mildred C. Clough's Laboratory, 24 E. Eager Street, Baltimore.
Dr. Henry T. Collenberg's Laboratory, 904 N. Charles Street, Baltimore.

MASSACHUSETTS

Clinical Laboratory, Francis L. Burnett, M.D., Director, 205 Beacon Street, Boston.
Physicians Clinical Laboratory, J. Edwin Oslin, M.D., Director, 30 Huntingdon Avenue, Boston.
Physicians' Laboratory, A. S. Hudson, M.D., Director, 93 Massachusetts Avenue Boston.
New England Laboratories, Inc., George L. Schadt, M.D., Director, 121 Chestnut Street, Springfield.

MICHIGAN

Detroit Clinical Laboratory, W. L. Brosius, M.D., Director, 2033 Park Avenue, Detroit.
National Pathological Laboratories, Inc., F. J. Eakins, M.D., Director, 312 David Whitney Building, Detroit.
Owen Clinical Laboratory, R. G. Owen, M.D., Director, 709-711 Stroh Building, Detroit.
Grand Rapids Clinical Laboratory, G. L. Bond, M.D., Director, 201 Metz Building, Grand Rapids.
Dr. James S. Brotherhood's Laboratory, Metz Building, Grand Rapids.
Central Laboratory, O. W. Lohr, M.D., Director, 302 S. Jefferson Avenue, Saginaw.

MINNESOTA

Murphy Laboratories, Ignatius J. Murphy, M.D., Director, 812 Besse Building, Minneapolis.

MISSISSIPPI

The McDill Laboratories, L. B. Neal, M.D., and J. E. McDill, M.D., Directors, Lamar Life Building, Jackson.
Pathologicl Laboratories, W. W. Robinson, M.D., Director, Court and Broad Streets, West Point.

MISSOURI

Duncan Laboratories, Ralph E. Duncan, M.D., Director, Argyle Building, Kansas City.
Laboratory of Clinical Pathology, Frank J. Hall, M.D., Director, 509 Wirthman Building, Kansas City.
Dr. Murray C. Stone's Laboratory, 615 Woodruff Building, Springfield.
Dr. Rudolph Buhman's Private Laboratory, 537 N. Grand Boulevard, St. Louis.
Gradwohl Laboratories, R. B. H. Gradwohl, M.D., Director, 3514 Lucas Avenue, St. Louis.
Dr. D. L. Harris' Laboratory, Metropolitan Building, St. Louis.
Dr. George Ives' Clinical Laboratory, University Club Building, St. Louis.
Dr. C. L. Klenk's Pathological and Bacteriological Laboratory, 420-422 Metropolitan Building, St. Louis.
Lister Pathological Laboratory, A. M. Ecklund, M.D., Director, 4500 Olive Street, St. Louis.
National Pathological Laboratory, R. L. Thompson, M.D., Director, University Club Building, St. Louis.

MONTANA

The Walker Laboratories, Thomas F. Walker, M.D., Director, Stanton Bank Building, Great Falls.

NEBRASKA

Laboratory of Clinical Pathology, Michael G. Wohl, M.D., Director, 517-518 City National Bank Building, Omaha.
Nebraska Laboratory of Clinical Pathology, E. T. Manning, M.D., Director, 792-796 Brandeis Theatre Building, Omaha.

NEW JERSEY

Cline Laboratory, B. F. Cline, M.D., Director, 264 Central Avenue, Orange.

NEW MEXICO

Dr. J. R. Van Atta's Laboratories, First National Bank Building, Albuquerque.

NEW YORK

Bender Hygienic Laboratory, J. R. Lisa, M.D., Director, 120 S. Lake Street, Albany.
Kilmer Laboratory of Clinical Pathology, George H. Fox, M.D., Director, 21 Park Avenue, Binghamton.
Biophil Laboratory for Diagnosis and Research, Florence A. Blake, M.D., Vice President and Treasurer, 32 Court Street, Brooklyn.
Brooklyn Diagnostic Institute, J. Gutman, M.D., Director, 867 St. Marks Avenue, Brooklyn.
Clinical Laboratory of Dr. William Moitrier, Jr., 1219 Dean Street, Brooklyn.
Dr. Horace Greeley's Laboratory, 140 Clinton Street, Brooklyn.
The Lindsay Laboratories, M. E. Marten, M.D., and J. C. Knapp, M.D., Directors, 114 Ashland Place, Brooklyn.
Buffalo Laboratory for Clinical Diagnosis, A. A. Thibaudeau, M.D., Director, 23 Irving Place, Buffalo.
Dr. Richard N. DeNiord's Laboratory, 482 Franklin Street, Buffalo.

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* The text of the preliminary draft of the "Essentials" will be found on pages 1068 and 1069.

Dr. J. J. Parson's Laboratory, 312 Savings Bank Building, Cortland.
Diagnostic Laboratory, Alfred Bell, M.D., Director, 216 Randall Avenue, Freeport, L. I.
Dr. N. Campbell's Biological and Analytical Laboratory, 424 Fulton Street, Jamaica.
Dr. Lindsley F. Cocheu's Laboratory, 39 W. 67th Street, New York.
Dr. Andrew A. Eggston's Laboratory, 653 Park Avenue, New York.
Dr. Joseph Felsen's Laboratory, 157 West 117th Street, New York.
Harlem X-Ray and Pathological Laboratories, L. M. Suchoff, M.D., Director, 1767 Madison Avenue, New York.
The Harvey Laboratories, Elsie Fox, M.D., Director, 355 E. 149th Street, New York.
Dr. Oliver S. Hillman's Laboratory, 114 East 54th Street, New York.
Dr. J. Koffler's Chemical and Bacteriological Laboratory, 787 Prospect Avenue, New York.
Medical Laboratories, Inc., Byron C. Darling, M.D., Director, 30 E. 40th Street, New York.
Medical Laboratory, Cyrus W. Field, M.D., Director, 126 E. 64th Street, New York.
National Pathological Laboratories, Archibald McNeil, M.D., Director, 18 E. 41st Street, New York.
Neurological Institute, Clinical Laboratory, Oliver S. Hillman, M.D., Director, 149 E. 67th Street, New York.
Physicians Diagnostic Laboratory Inc., G. L. Rohdenburg, M.D., Director, 34 W. 49th Street, New York.
Dr. Julius Pincus' Pathological Laboratory, 250 West 75th Street, New York.
Dr. Frederic E. Sondern's Clinical Laboratory, 20 W. 55th Street, New York.
Dr. Thomas S. Winslow's Pathological Laboratory, 22 W. 74th Street, New York.
Medical Laboratory of Dr. George W. O'Grady, 35 Chestnut Street, Rochester.
Dr. Herman G. Wahlig's Laboratory, Sea Cliff Avenue, Sea Cliff.
Troy Laboratory, H. W. Carey, M.D., Director, 72 Second Street, Troy.

OHIO

Langdon-Meyer Laboratories, Fletcher Langdon, M.D., Director, 519 Main Street, Cincinnati.
The Cleveland Laboratory, R. G. Schnee, M.D., Director, 655 Erie Street, Cleveland.
Dr. C. L. Cummer's Laborataory, 2417 Prospect Avenue, Cleveland.
Diagnostic Laboratories, A. A. Eisenberg, M.D., Director, 7016 Euclid Avenue, Cleveland.
The Medical Chemical Laboratory, John G. Spenzer, M.D., Director, 646 Rose Building Cleveland.
Clinical and Pathological Laboratory, J. J. Coons, M.D., Director, 370 East Town Street, Columbus.
Columbus Clinical and Pathological Laboratory, Frank W. Watson, M.D., Director, 328 E. State Street, Columbus.
Private Clinical Laboratory, N. D. Goodhue, M.D., Director, 920 Fidelity Medical Building, Dayton.
Springfield Clinical and Pathological Laboratory, Clarence L. Jones, M.D., Director, 330 Fairbanks Building Springfield.
Toledo Clinical Laboratories, R. C. Longfellow, M.D., Director, 1611 Twenty-Second Street, Toledo.
Dr. Theodore Zbinden's Clinical Laboratory, 412 Cotton Building, Toledo.

OKLAHOMA

Clinical Laboratory of Dr. Elizabeth Chamberlin, Washington County Memorial Hospital, Bartlesville.
Laboratory of Dr. A. B. Leeds, First National Bank Building, Chickasha.
Medical Arts Laboratory, W. H. Bailey, M.D., Director, 7th Floor Medical Arts Building, Oklahoma City.
Dr. T. A. Hartgraves' Laboratories, 308 Commerce Building, Okmulgee.
Terrell's Laboratories, S. C. Venable, M.D., Director, National Bank of Commerce Building, Tulsa.

OREGON

Dr. H. H. Foskett's Clinical Laboratory, 712 Journal Building, Portland.
Howe and Huntley Laboratories, Calvin S. White, M.D., Director, Medical (Park) Building, Portland.
Dr. Harriet J. Lawrence's Laboratory, 820 Selling Building, Portland.

PENNSYLVANIA

Laboratory of Clinical Medicine, D. de Rivas, M.D., Director, 1833 Chestnut Street, Philadelphia.
Laboratory of Pathology and Bacteriology, Eugene J. Asius, M.D., Director, 1524 Chestnut Street, Philadelphia.

TENNESSEE

Dr. Tolbert C. Crowell's Clinical Laboratories, 432-435 Volunteer Building, Chattanooga.
Dr. R. V. De Pue's Laboratory, 503 W. Church Street, Knoxville.
Dr. J. S. Fleming's Laboratory, Exchange Building, Memphis.
Dr. L. V. Schmittou's X-Ray and Pathological Laboratories, 1122-1124 Exchange Building, Memphis.
Dr. Herman Spitz's Bacteriological and Pathological Laboratories, 319-325 Lambuth Building, Nashville.

TEXAS

Dr. G. M. Graham's Clinical Laboratory, 324 Littlefred Building, Austin.
Dr. Wilbur F. Thomson's Laboratory of Clinical Pathology, 925-928 San Jacinto Building, Beaumont.
Laboratory of Dr. R. C. Curtis, 127½ W. Collin Street, Corsicana.
Dr. Marvin D. Bell's Laboratory of Clinical Pathology, 1109 Medical Arts Building, Dallas.
Dr. J. H. Black's Laboratory, Medical Arts Building, Dallas.
Terrell's Laboratories, Charles F. Carter, M.D., Director, 706 Medical Arts Building, Dallas.
The Denison Clinical Laboratory, Paul Pierce, M.D., Pathologist, 408 Security Building, Denison.
Turner's Clinical Laboratory, George Turner, M.D., Director, 913-917 First National Bank Building, El Paso.
Dr. W. W. Waite's Laboratory, P. O. Box 63, El Paso.
Dr. T. C. Terrell's Laboratories, 308-324 Texas National Bank Building, Fort Worth.
Dr. Edward F. Cooke's Laboratory, 402 Keystone Building, Houston.
Dr. Martha A. Wood's Laboratory, 431 Kress Building, Houston.
X-Ray Clinical Laboratories, H. T. Nicolle, M.D., Director, 401 Deutser Building, Port Arthur.
Hamilton-Stout Laboratories, W. S. Hamilton, M.D., and B. F. Stout, M.D., Directors, City National Bank Building, San Antonio.
Dr. I. Warner Jenkins' Laboratory, 310-312 Amicable Building, Waco.
Dr. M. H. Glover's Laboratories, 228 Bob. Waggoner Building, Wichita Falls.

UTAH

Dr. Alfred Blumberg's Biologic Laboratories, 824 Boston Building, Salt Lake City.
Salt Lake Pathological Laboratory, T. A. Flood, M.D., Director, 612 McCormick Building, Salt Lake City.

WASHINGTON

Heinemann Diagnostic Laboratories, Maria S. Heinemann, M.D., Director, 403 Bell National Bank Building, Bellingham.
Physicians Clinical Laboratory, O. J. West, M.D., Director, 1001 Cobb Building, Seattle.
Hollister Stier Laboratories, Inc., Robert F. E. Stier, M.D., Director, 312 Old National Bank Building, Spokane.
Drs. Pattons' Wassermann and Diagnostic Laboratories, M. M. Patton, M.D., Director, 501-502 Paulsen Building, Spokane.

WISCONSIN

Hopkinson's Laboratory, E. L. Tharinger, M.D., Director, 211 Grand Avenue, Milwaukee.
Dr. J. J. Seelman's Laboratories, Inc., 79 Wisconsin Street, Milwaukee.

APPENDIX A.—FULL REPORT OF PRELIMINARY STEPS TO THE SURVEY OF CLINICAL LABORATORIES

I. Report of Bureau of Legal Medicine and Legislation of the American Medical Association to the House of Delegates on the Control of Clinical Laboratories.

San Francisco, June, 1923.

At the San Francisco session, the House of Delegates referred to the Bureau of Legal Medicine and Legislation, with power to act, the following resolution:

WHEREAS, Measures for the control of clinical laboratories have been introduced in the legislatures of certain states, and

WHEREAS, This form of legislation affects the interests of physicians, chemists, bacteriologists and pathologists; therefore, be it

Resolved, That the House of Delegates authorize the President to appoint a committee to confer with representatives of the American Chemical Society, and the Association of Pathologists and Bacteriologists regarding this matter and report back one year hence with such recommendations as may be pertinent; provided in the interim the Board of Trustees, cooperating with the committee, take such action as may be necessary to protect the interests of the profession and the public.

Subsequently, the House of Delegates, on the initiative of the Section on Pathology and Physiology, adopted the following resolution:

The Section on Pathology and Physiology respectfully recommends to the House of Delegates that a committee be appointed by the President to undertake an investigation of clinical laboratories with a view to secure a responsible and proper supervision of and adequate equipment and facilities for this branch of medical work.

Pursuant to this resolution, the President referred the matter to the Council on Medical Education and Hospitals, and the latter appointed a special committee as follows:

Dr. Louis B. Wilson, Chairman.

Dr. Francis C. Wood.	Dr. E. R. Stitt.
Dr. C. P. Emerson.	Dr. D. J. Davis.

On the initiative of the Bureau of Legal Medicine and Legislation, the American Chemical Society and the American Association of Pathologists and Bacteriologists appointed committees to confer with representatives of the American Medical Association. The committee appointed by the American Chemical Society was made up of:

Dr. Julius Stieglitz, chairman,

Dr. C. L. Parsons.	Dr. Charles H. LaWall.

The committee appointed by the Association of Pathologists and Bacteriologists comprised the following:

Dr. O. T. Schultz, chairman.

Dr. Arthur I. Kendall.	Dr. D. J. Davis.
Dr. J. P. Simonds.	Dr. E. R. LeCount.

The several committees named above met with Dr. Paul N. Leech of the Chemical Laboratory of the American Medical Association, who acted as secretary, without vote, and with Dr. William C. Woodward, executive secretary of the Bureau of Legal Medicine and Legislation, in the offices of the Association, March 6, 1924. Dr. Woodward was elected chairman. After a full discussion of those aspects of laboratory control of interest to the medical profession and to nonmedical men belonging to other professional groups, the resolutions set forth below were adopted. The joint committee believed that it was not its province, but rather the sole province of the committee appointed by the American Medical Association, to undertake an investigation of clinical laboratories with a view to secure a responsible and proper supervision of and adequate equipment and facilities for them, as contemplated in the second of the resolutions adopted by the House of Delegates, set forth above.

The resolutions adopted at the joint meeting are as follows:

REPORT OF JOINT COMMITTEE

In proposing the following specific recommendations concerning the regulation of clinical laboratories, the joint committee of the American Medical Association, the American Chemical Society and the American Association of Pathologists and Bacteriologists wish to emphasize the importance of encouraging and insuring the adequate education of every laboratory worker in the fundamental sciences which he applies. A clinical laboratory, as that term is used by the committee, is an institution organized for the practical application of one or more of the

fundamental sciences by the use of specialized apparatus, equipment and methods for the purpose of ascertaining the presence, progress and source of disease.

It is the unanimous judgment of the committee:

1. That it should be illegal for any person not licensed by law so to do, to assume the responsibility of making the diagnosis or of deciding on the progress or source of disease on the basis of any results of a chemical, pathologic, serologic, bacteriologic, radiologic or microscopic observation or other laboratory examinations undertaken; and that where laws do not now restrict diagnosis or the clinical interpretation of laboratory examinations to licensed classes of medical practitioners, laws should be enacted to effect that end.

2. That any law providing for the licensing of professional workers in laboratories devoted to ascertaining the presence, progress or source of disease should provide for the examination of members of each profession by competent authorities belonging to the same profession.

3. That as long as an organization or individual engaged in examinations to ascertain the presence, source or progress of disease refrains from all diagnostic and prognostic interpretation of the results of such laboratory tests as provided for in paragraph 1, any effort to force such organization or individual to place itself under the direction of a representative of any other profession is to be deprecated.

4. That the American Chemical Society, the American Medical Association, and the American Association of Pathologists and Bacteriologists should cooperate to establish the principles enumerated in the foregoing resolution whenever legislation in this field may be proposed, and that the cooperation of other national bodies should be solicited.

5. That clinical laboratories be standardized in accordance with the principles laid down in the preceding paragraphs, and legislation should be enacted to insure competent personnel and suitable equipment.

The foregoing report of the joint committee has been approved by the Council of the American Chemical Society and the Council of the American Association of Pathologists and Bacteriologists. It is recommended that it be approved by the House of Delegates.

WILLIAM C. WOODWARD, Executive Secretary.

II. Report of Committee on the Control of Clinical Laboratories to the Council on Medical Education and Hospitals of The American Medical Association.

Chicago, June 11, 1924.

Pursuant to a resolution of the House of Delegates in June, 1923, the president of the American Medical Association appointed the committee named below to confer with representatives of the American Chemical Society, of the American Association of Pathologists and Bacteriologists, and of the Section on Pathology and Physiology of the American Medical Association concerning the control of clinical laboratories. The arrangement for the conference was referred to the Bureau of Legal Medicine and Legislation. This conference was held in Chicago, March 6, 1924. A report of the proceedings made by the Bureau of Legal Medicine and Legislation is herewith appended. In this report it is stated that:

"The joint committee believed that it was not its province, but rather the sole province of the committee appointed by the American Medical Association, to undertake an investigation of clinical laboratories with a view to secure a responsible and proper supervision of and adequate equipment and facilities for them as contemplated in the resolutions adopted by the House of Delegates set forth above."

The joint committee also defined clinical laboratory as follows:

"A clinical laboratory, as that term is used by this committee, is an institution organized for the practical application of one or more of the fundamental sciences by the use of specialized apparatus, equipment and methods for the purpose of ascertaining the presence, progress and source of disease."

The paragraphs quoted above place on the committee from the American Medical Association the work of making a survey of all clinical laboratories, either within or unconnected with hospitals in the United States. If this enormous task is to be undertaken, the committee believes it can best be done through the Council on Medical Education and Hospitals acting alone or in cooperation with other national organizations interested in the same problem. The committee would therefore recommend that the Council on Medical Education and Hospitals undertake a survey of all clinical laboratories, both private and public, either within or unconnected with hospitals, which come under the definition of the joint committee as quoted above. Your committee would further recommend that the following questions be included in the Council's survey and that the replies thereto when properly analyzed be made a part of the criteria for determining the standard of any list of approved laboratories, the making or publication of which the Council may recommend.

(*a*) *Housing and Equipment.*—1. Are the housing and equipment adequate for the purposes which the laboratory purports to accomplish?

2. Are they adequate to properly serve the interests of the patients in the hospital with which the laboratory may be connected?

(*b*) *Personnel.*—1. Is there sufficient personnel for the purposes of the laboratory?

2. Are those in charge properly qualified?

3. What is the distribution of their duties?

(*c*) *Functions.*—1. What work does the laboratory purport to do?

2. Does the laboratory staff treat patients? If so, is this under the direction of the physician in charge of the patient? Is it ever done by persons not licensed to practice medicine and not working under the immediate supervision of the licensed physician?

3. What industrial work, if any, not connected with the functions of a clinical laboratory is carried on? Does such work, if any, interfere with the duties of the laboratory personnel in their clinical laboratory work?

4. Does the laboratory do contract work for nonmedical organizations? If so, what is the nature of the contract and the extent of such work?

(*d*) *Interns' Opportunities* (in hospital laboratories).—To what extent are interns required, permitted or forbidden to make routine laboratory examinations?

2. To what extent are interns required, permitted or forbidden to attend necropsies and clinical-pathologic conferences?

(*e*) *Publicity.*—1. Is the laboratory's publicity matter confined to announcements made direct to physicians either through bulletins or in recognized medical journals, or is it directed to the nonprofessional public, as, for example, by announcements in popular journals and periodicals?

2. Is its publicity in professional good taste by being limited to statements of fact, as, for example, name, address, telephone number, names and titles of active responsible personnel, fields of work covered, office hours, directions for sending specimens, etc., or does it contain misleading overstatements or claims to unusual superiority?

(*f*) *Training of Laboratory Technicians.*—Does the laboratory attempt to train technicians other than to supply the needs of its own staff? If so, are its facilities for instruction adequate and is its course of training satisfactory for the education of technicians? What certificate, if any, does it grant to technicians which it has trained?

This committee would suggest that the Council on Medical Education and Hospitals undertake at its earliest convenience, either alone or in cooperation with other national organizations, the survey of any laboratory on the foregoing plan at the request of any local unit of the American Medical Association, or of any such laboratory. It would further suggest that such a survey covering the entire United States be carried forward in a methodical manner regardless of the receipt or absence of any such requests.

Respectfully submitted.

LOUIS B. WILSON, Chairman.
D. J. DAVIS.
FRANCIS C. WOOD.

Absent from meeting, E. R. STITT, C. P. EMERSON.

APPENDIX B.—THE QUESTIONNAIRE

SURVEY OF LABORATORIES

For All Clinical Roentgen-Ray and Other Laboratories That Do Clinical Work for Physicians

Name and address.....When founded.....By whom founded.....

1. Type of organization: Individually owned.....Partnership..... Corporation.....Public Health.....City.....State.....Federal..... Hospital.....Group Clinic.....Dispensary.....Medical College..... Roentgen-Ray.....Others (please specify).....
2. Housing: Discuss space occupied.....
3. Equipment: (*a*) State in general the amount and kind of equipment..... (*b*) Is equipment adequate properly to serve the interests of the laboratory's patrons?.....
4. Personnel: (*a*) Is the director a medical graduate?.....If not, what degree does he hold?..... (*b*) Kindly list your staff, giving following data:

Name	Education and Degrees	Experience	Duties	Fraction of Time Spent in Laboratory
.....	.....	.....	.....	.....

5. Functions: (*a*) Kindly indicate the kinds of work the laboratory purports to do. State numbers of each kind of test, approximately if necessary.

NUMBER PER YEAR

Blood....Vaccines....Basal Metabolism.....Feces.....Necropsies..... Electrocardiograph.....Gastric.....Bacteriologic.....Wassermann..... Spinal Fluid.....Serologic.....Sensitization Tests.....Sputum..... Pathologic.....Urine.....Blood Chemistry.....Others.....

(*b*) Does the laboratory give any treatments?.....If so, what kind of treatments are given?.....

(*c*) What are the rules relating to diagnosis and treatment?.....

(*d*) What supervision is there over the diagnoses and treatments?..... By whom?.....

(*e*) Is diagnosis or treatment ever made by persons not licensed to practice medicine and not working under the immediate supervision of a licensed physician?.....

(*f*) What industrial work, if any, not connected with the functions of a clinical laboratory, is carried on?.....

(*g*) Does such work interfere with the duties of the personnel in their clinical laboratory work?.....

(*h*) Is contract work done (1) for medical institutions?.....(2) for nonmedical organizations?.....

(*i*) What is the nature of such work?.....

(*j*) What are the terms of the contract?.....

(*k*) Does the laboratory do contract work for physicians?.....Is a keep-well service conducted for the laity?.....

(*l*) Is all work received through other physicians or are examinations made for patients directly?.....

(*m*) Are reports mailed to physicians only?.....

(*n*) Do any of the physicians connected with laboratory conduct a medical practice of their own?.....

(*o*) What associations do you have with hospitals?.....With other institutions?.....

(*p*) What public health work do you do for city, state or federal government?.....

(*q*) Are the members of the laboratory staff doing research work?..... State briefly the nature of this work.....

(*r*) Is any animal experimentation being carried on?.....

(*s*) Give the number of papers published during the last year.....

6. Publicity: (*a*) Kindly name the papers, journals and periodicals in which you have had advertisements during the last year.....(*b*) What other means of publicity are employed?.....Kindly send fee lists, prospectus and clippings of all advertisements carried during the last year.
7. Training of Laboratory Technicians: (*a*) Does the laboratory attempt to train technicians other than to supply the needs of its own staff?.....(*b*) What is the length of the course?.....(*c*) For whom is it intended, whether physicians, nurses, or others?..... (*d*) Entrance requirements.....(*e*) Tuition charged.....(*f*) Course of instruction.....(*g*) What certificate is given?.....

REMARKS .....

Information furnished by.....Official position.....Date.....

THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION

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SATURDAY, APRIL 3, 1926

HOSPITAL SERVICE IN THE UNITED STATES

This week we present the fifth annual compilation of statistics regarding hospital service in the United States. Although similar statistics have been compiled and published in special bulletins since 1914 by the Council on Medical Education and Hospitals, the first regular hospital number of THE JOURNAL did not appear until in 1921, and contained statistics based on a special survey made during 1920. A hospital number of THE JOURNAL has been issued each subsequent year with the exception of 1924, when the date of issuance was advanced to early in 1925. These statistics have become more extensive as the work has progressed, and this year they are exceptionally elaborate and complete.

HOSPITALS ESTABLISHED IN FIVE YEARS

New hospitals have been established averaging about 100 each year, the total number in the five years being 508. State maps are again published similar to those in 1920. On these maps the open or white symbols indicate hospitals established since 1920. It is interesting to note in table 3, also, that of the 1,695 counties which in 1920 were without hospitals, 341 have since been supplied, leaving 1,354 which are still without hospitals.

INTERESTING DATA FOR MARYLAND

An interesting situation appears in Maryland, where the total number of hospitals has been diminished from 136 in 1920 to ninety-three in 1925. Instead of hospital facilities being lessened, however, as might be expected, on the contrary there has been an actual increase in hospital facilities, as the total number of beds has been increased by 212 since 1920, and two of the eleven counties having no hospitals in 1920 have since been supplied. Although the ratio of hospital beds to population has decreased from 1 to 231 in 1920 to 1 to 235 in 1925, nevertheless the percentage of beds constantly occupied by patients has increased from 71 per cent in 1920 to 78 per cent in 1925. It is apparent, therefore, that the hospitals discontinued have been in districts which were oversupplied, and that hospitals in districts not satisfactorily supplied have been increased in capacity. The readjustments, therefore, appear to have been of advantage.

PHYSICIANS ON HOSPITAL STAFFS

Information of special interest and importance is set forth in table 5, which gives for each state the number of physicians who at present have hospital connections, either on the staff or as residents, interns, medical directors or superintendents. The figures for staff members include some unavoidable duplications, as certain physicians are members of the staffs of two or more hospitals, especially in the larger cities. In Chicago, for example, of the 1,504 physicians on hospital staffs, there are 420 duplications, as 329 physicians are on the staffs of two hospitals each, thirty-five are staff members of three hospitals each, and seven have membership on staffs of four hospitals. It is estimated, therefore, that the total number of physicians on hospital staffs should be discounted by not more than 10 per cent, as duplications occur in the few largest cities. There are no duplications in the physicians included among resident physicians, interns or hospital superintendents. Altogether, therefore, approximately 90,000, or 60 per cent of all physicians in the United States, have immediate connection with the hospitals.

APPROVED LISTS OF HOSPITALS

Hospitals have been listed by the Council in four groups, the first three of which are approved. All hospitals named in either THE JOURNAL or the American Medical Directory are approved as places where sick or injured persons can secure at least fairly efficient care. Hospitals in which the educational function is especially developed and which provide exceptional facilities for the training of interns are included in a special list [1] of those approved for internships. A list is now being developed of hospitals which provide acceptable residencies in one or more specialties for physicians who have already completed internships in general hospitals.[2]

ELIMINATION OF THE UNFIT

The fourth group of hospitals contains the names of 294 institutions which—because of grossly unethical reasons, such as criminal practices, admission to their staffs of members who are seriously unqualified, either morally or professionally, flagrant methods of advertising or for other valid reasons—are deemed unworthy of being included in any published list of reputable hospitals. The separation of such institutions from the Council's published lists marks the development of an aggressive campaign to establish safeguards against irresponsible or malicious institutions of this type which are an actual menace to the public. For these reasons, therefore, they are excluded from the lists of institutions held out as worthy of receiving the public's patronage.

1. List published on pages 1056-1063, inclusive.
2. A tentative list of these hospitals appears on pages 1063 and 1064.

APPRECIATION

Our special acknowledgments and appreciation are extended to the many hospital superintendents, chiefs of staffs, official executives of government hospitals and many others who have cooperated with us to a most remarkable extent in the preparation of the elaborate and complete reports which have made possible the publication of these valuable statistics.

HOSPITALS MAINTAINED BY NATIONAL, STATE AND LOCAL GOVERNMENTS

The hospital services maintained by the national government have been considerably increased since 1909, largely because of conditions resulting from the World War. Of all hospital beds, the proportion controlled by the national government has increased from 2.1 per cent in 1909 to 2.3 per cent in 1914, 3.1 per cent in 1918, 6.8 per cent in 1923 and 7.1 per cent in 1925. There are now 299 hospitals maintained by the national government with a total capacity of 57,091 beds, of which an average of 42,377, or 74.2 per cent, are constantly occupied. These figures cover the hospitals maintained by the United States Army, Navy and Public Health Service, the Veterans' Bureau, and several hospitals for government beneficiaries located in the District of Columbia and elsewhere.

For many years the state governments have had a comparatively large part in the provision of hospital facilities, particularly in maintaining large hospitals for the insane, the tuberculous and sufferers from other chronic diseases. In 1909, the state governments maintained 45 per cent of all hospital beds, but by 1925 the percentage had been reduced to 40. The capacity of the 351 hospitals maintained by state governments, however, has increased from 189,049 beds in 1909 to 317,264 beds in 1925, and of the latter, 305,466 beds, or 96.2 per cent, are ordinarily occupied. To an increasing extent the states are creating and maintaining general teaching hospitals for their state university medical schools. In sixteen states, eighteen such hospitals are now being maintained with a total of 4,582 beds and an average of 3,467 patients. Ten states also maintain twenty-three general hospitals which are not essentially for teaching, these having 4,496 beds, of which 3,865 on the average are regularly occupied. Of these states, Mississippi maintains four regional charity hospitals, Louisiana has two such hospitals and Pennsylvania has ten, these being for the care of the sick and injured in the mining districts. Other states that maintain some form of general hospital service, including mainly hospitals for crippled children, are Illinois, Iowa, Minnesota, Nebraska, New York, North Carolina and Rhode Island.

Local and county governments now maintain 471 hospitals, with 53,027 beds. City governments maintain 371 hospitals with 59,630 beds, and cities and counties combined maintain sixty-nine hospitals with 7,118 beds. Altogether, county and municipal governments combined support 911 hospitals having 119,775 beds, comprising 14.9 per cent of the entire bed capacity in the United States.

At the present time, therefore, 62 per cent of all hospital beds in this country [1] are financed by government agencies—national, state, county and city. It is interesting to note that the number of beds in hospitals maintained by government agencies has held about the same ratio to the total beds in all hospitals in the country, at least since 1909, when the earliest reliable statistics were compiled regarding the bed capacity of all hospitals. This leaves 38 per cent of all hospital beds in the United States which are maintained by nongovernmental agencies.

VITAL CAPACITY AND PROGNOSIS

Vital capacity is measured by the largest expiration following the deepest inspiration. Until recently this physical feature of the respiratory functions received little serious consideration except as a physiologic experiment. Peabody has significantly remarked that those who, during the last few years, have been studying the function of respiration have devoted their attention largely to the changes in the blood gases and have paid little attention to the mechanical aspect of pulmonary ventilation. Variations in the gaseous content of the blood are of course of the utmost importance, and they affect the stimulus to respiration; but at the same time, Peabody adds, one cannot neglect the response on the part of the lungs to this stimulus. This response manifests itself in the ventilatory function of the lungs, which promotes the proper exchange of gases through the cells of the alveoli.

Since vital capacity is an indication of the competence of the mechanism of external respiration, it has of late come to be regarded as in no small degree indicative of physical fitness. For example, the measurements recently made by White and McGuire [2] of the United States Army Medical Corps on students in an army summer training camp indicate that, despite the present limitations of the technic of observation, the vital capacity is at least in some degree indicative of general physical condition. With improvement of the latter as the result of the course of training prescribed, the vital capacity tended to increase correspondingly.

As Peabody, who has devoted much attention to the subject in the clinic, recently pointed out, in medicine the determination of the vital capacity of the lungs has been most useful in the field of cardiac disease. It is less valuable in diagnosis than it is in prognosis,

1. See Table 9 on page 1014.
2. White, S. A., and McGuire, P. F.: Vital Capacity in a Citizens' Military Training Camp, Arch. Int. Med. 36: 351 (Sept.) 1925.

and it is of particular interest in following the course of cases from day to day and from week to week. According to Peabody, the graphic record of the vital capacity of the lungs in a case of chronic heart disease usually gives one a better idea of the clinical course of the case than do any of the other observations that are made. The use of the spirometer will need to be "standardized" more universally and the sources of inaccuracy or uncertainty in determinations be taken into account more adequately before the estimates will be entirely satisfactory. To one who recalls the evolution of the apparatus for the measurement of basal metabolism, such technical features do not seem forbidding. The occasionally uttered criticism that estimates of vital capacity show considerable variations in "normal" values may remind us that other valued data, such as the leukocyte counts, have helpful significance notwithstanding a considerable latitude in the deviations of the customary figures from a mean average.

It is significant, therefore, that discussions of vital capacity are looming larger in the eyes of surgeons, particularly in relation to thoracic surgery. Graham of St. Louis has pointed out that the effect of various intrathoracic procedures on the mechanism of external respiration is to some extent dependent on vital capacity. Yates [3] of Milwaukee has lately defended the following theses: Estimations of vital capacity are helpful in diagnosis, in prognosis, in determining the effects of treatment and in measuring ultimate results as they record the effectiveness of the basic function, external respiration. Protection of the structures and of the activities of the structures that establish and control external respiration so that vital capacity is kept at the highest level permitted by circumstances is the guide to effective treatment of intrathoracic diseases. Deliveries of blood through bronchial arteries and through the pulmonary arteries are controlled by the functional activities of lungs, which are proportionate to vital capacities. Resistance, defense, growth and repair of intrathoracic structures, as well as of the entire organism, are commensurate with vital capacity. Accordingly, it should follow that acute and chronic intrathoracic diseases and recent thoracic injuries can be treated more simply and safely by measures that will conserve external respiration by keeping vital capacities high during active phases of maladies and leave them, after convalescence, at their highest. What procedures will best promote these desired ends may remain to be determined. When a competent surgical investigator [3] defines vital capacity as "a fair criterion of life, reaching its peak when physiologic competence is highest, diminishing as incompetence increases and becoming zero when respiration ceases," intrathoracic therapy cannot well afford to overlook this helpful index.

3. Yates, J. L.: The Significance of Vital Capacity in Intrathoracic Therapy, Arch. Surg. **12**: 257 (Jan.) 1926.

IRON AND BLOOD REGENERATION

"The history of anemia treatment with drugs is indeed a tale to make the judicious grieve." These are the words that Whipple and Robscheit-Robbins [1] used in discussion of their studies of blood regeneration. A multitude of drugs, they continue, have been proposed, enthusiastically supported, then questioned, and finally abandoned. On the whole, iron seems to enjoy the most constant favor by practicing physicians. Yet there are many good reasons for past and present misconceptions. Clinical control of patients is difficult and the number of variables almost infinity; therefore it need not surprise the critic to find that there have been differences of opinion relating to the influence of various drugs on various anemic conditions. Diet factors, Whipple and Robscheit-Robbins add further, are only recently coming in for proper study and consequent appreciation.

The most striking feature of this aspect of the subject is the demonstration now furnished by various investigators that iron per se is, ordinarily at least, not always the outstanding beneficial factor in the reconstruction of blood pigment. Somehow attention has been centered so many years on the uniqueness of hemoglobin as a ferruginous protein that the possible significance of the non-iron residue of the molecule tends to be overlooked. Furthermore, it is not unlikely that the degree of activity of the hematopoietic organs, whatever they are, may be quite as important as the organic and inorganic sources out of which blood is regenerated. In other words, hemoglobin formation and hematopoiesis in general are presumably complex functions the success of which is modified by various factors.

Less than four years ago, Whipple [2] specifically indicated some of these. Among the potent factors exerting a positive influence on hemoglobin, he wrote, stand, first, red meat and cooked liver, hemoglobin and butter fat. Then come spinach and full diets of common food grains and milk. Practically inert are other chlorophyl-containing vegetable leaves—celery, parsley, beet tops and sprouts. In the same negative group are fish and clams, onions and beets and animal fats, including lard and cod liver oil. Iron and arsenic in the common drug preparations are likewise inert under these conditions.[3] The inclusion of hemoglobin itself with a substance so widely different as is edible fat indicates the difficulty of interpreting the varied findings heretofore presented. To Whipple and his

1. Whipple, G. H., and Robscheit-Robbins, F. S.: Blood Regeneration in Severe Anemia, I, Standard Basal Ration Bread and Experimental Methods, Am. J. Physiol. **72**: 395 (May) 1925. Robscheit-Robbins, F. S., and Whipple, G. H.: Blood Regeneration in Severe Anemia, II, Favorable Influence of Liver, Heart and Skeletal Muscle in Diet, ibid., p. 408. Whipple, G. H., and Robscheit-Robbins, F. S.: Blood Regeneration in Severe Anemia, III, Iron Reaction Favorable—Arsenic and Germanium Dioxide Almost Inert, ibid., p. 419. Robscheit-Robbins, F. S., and Whipple, G. H.: Blood Regeneration in Severe Anemia, IV, Green Vegetable Feeding, ibid., p. 431.

2. Whipple, G. H.: Pigment Metabolism and Regeneration of Hemoglobin in the Body, Arch. Int. Med. **29**: 711 (June) 1922.

3. This is discussed by Whipple, G. H.: Iron in Anemia, J. A. M. A. **86**: 367 (Jan. 30) 1926.

co-workers the value of iron seemed to depend on the severity of the anemia to be combated. Williamson,[4] who studied the problem at the University of Illinois, concluded that inorganic iron, whether given by mouth, subcutaneously or intravenously, is absorbed and may be found especially in the liver and spleen, but is not converted into hemoglobin. Animals made anemic by one or several large bleedings do not recover any more rapidly when inorganic iron is given in any of these ways. Williamson believes, however, that the efficiency of food iron is pronounced.

A new complication has been injected into the current confusion by Barkan[5] of the University of Frankfort, who has conducted an inquiry into the behavior of hemoglobin toward the digestive enzymes. If the pigment itself can facilitate blood regeneration, does it do so in part by acting as a source of ionized iron? In other words, what is the fate of the iron of ferruginous compounds in the gastro-enteric tract? The new tests indicate that neither the gastric acidity nor peptic or pancreatic digestive extracts, even when used in natural sequence, liberate iron from hemoglobin. Perhaps this furnishes further significant indication that it is not so much iron as the complexes with which it is associated that determine hematopoietic efficacy. Whether such a conclusion will be further substantiated by the behavior of other potent iron-bearing organic compounds in digestion remains to be learned.

Current Comment

CLINICAL LABORATORY STATISTICS

The first presentation of statistics with regard to the clinical laboratories in the United States appears in this issue of THE JOURNAL. Measures toward the establishing of efficient supervision over clinical laboratories were initiated at the meeting of the American Medical Association in San Francisco in July, 1923. A carefully worded questionnaire was mailed to all clinical laboratories, and the statistics published are based on the replies received. Meanwhile, with the assistance and advice of the officers of the various associations interested in clinical laboratories and many other experts in laboratory work, the Council prepared a schedule of principles or essentials[6] by which a list of institutions worthy of the Council's approval could be prepared. As a result, the first tentative list[7] of laboratories deemed worthy of approval is published in this issue. In its relation to clinical laboratories, the Council's attitude is the same as that which has guided its relationship to medical colleges, graduate medical schools and hospitals. In brief, the Council makes no attempt to interfere with any clinical laboratory or to prevent it from conducting its affairs as it deems best. However, if the clinical laboratory desires to obtain the Council's endorsement as an approved institution, it should be willing to comply with the principles designated by the Council as essential in clinical laboratories which are acceptably equipped and maintained. Thus a supervision over clinical laboratories in the Unted States has been established which, it is believed, will bring results no less satisfactory than the supervision established over medical schools and hospitals.

SOME MANIFESTATIONS OF FAT EMBOLISM

Fat embolism is not a modern subject. Porter has stated that it has been studied experimentally during two and a half centuries. Interest in its pathologic manifestations has been greatly stimulated since the World War, largely because fat emboli were held responsible by some students for the manifestation of shock, illustrations of which in large numbers are furnished by combats on the battle field.[1] It is easy to produce embolism experimentally in animals when fat is injected into a vein. Liberation of fat presumably occurs after shell fracture of large bones and after multiple wounds through masses of subcutaneous fat. Porter has pointed out that the fat in bones is in a condition peculiarly favorable to its entrance into the blood vessels after fracture. Large quantities of fat have repeatedly been found in the blood vessels after fracture. The entrance of fat into the blood vessels begins immediately after the wound. Frequently, if not always, there is fat embolism of the brain and other organs. Porter looked on fat embolism of the vasomotor center as the cause of shock. That such a view has not gone without debate, the columns of THE JOURNAL have repeatedly testified.[2] Heretofore, attention has been centered largely, if not exclusively, on the occurrence of fat emboli in two groups of tissues: the pulmonary vessels and the capillaries of the central nervous system. In fact, it is the pathologic disturbance in these two regions that has been regarded above all as responsible for deaths due to fracture of the bones. Paul and Windholz[3] of Vienna have lately stated, however, that other localities may suffer from the entrance of fat in hitherto unappreciated ways. This is particularly true of the capillaries of the kidneys. The latter may become so involved that renal function is altered to the extent of inducing uremic symptoms. Thus, death may ensue in the so-called cerebral type of fat embolism not only

4. Williamson, C. S., and Eta, H. N.: The Value of Iron in Anemia, Arch. Int. Med. **36**: 333 (Sept.) 1925.
5. Barkan, G.: Eisenstudien, I, Zur Frage der Einwirkung von Verdauungsfermenten auf das Hämoglobineisen, Ztschr. f. physiol. Chem. **148**: 124 (Oct.) 1925.
6. See page 1068, this issue.
7. See page 1070.

1. Porter, W. T.: Traumatic Shock, the Harvey Lectures, 1917-1919, Philadelphia, J. B. Lippincott Company.
2. The Vasomotor Mechanism in Shock, editorial, J. A. M. A. **70**: 625 (March 2) 1918; Trauma and Shock, ibid. **71**: 904 (Sept. 14) 1918; The Tissue Factor in Shock, ibid. **72**: 867 (March 22) 1919; Shock and Fat Embolism, ibid. **72**: 1848 (June 21) 1919. Cannon, W. B.: The Course of Events in Secondary Wound Shock, ibid. **73**: 174 (July 19) 1919. The Production of Shock, Correspondence, ibid. **73**: 439 (Aug. 9) 1919. Improved Methods of Treatment of Shock, editorial, ibid. **74**: 106 (Jan. 10) 1920; Factors Facilitating Circulatory Shock, ibid. **75**: 247 (July 24) 1920; The Alkali Reserve of the Plasma in Surgical Shock, ibid. **75**: 880 (Sept. 25) 1920. Crile, G. W.: The Mechanism of Shock and Exhaustion, ibid. **76**: 149 (Jan. 15) 1921. Shock as a Result of Toxemia, editorial, ibid. **78**: 585 (Feb. 25) 1922; Physiologic Effects of Air Concussion, ibid. **82**: 1446 (May 3) 1924.
3. Paul, F., and Windholz, F.: Experimentelle Studien ueber die Fettembolie und den durch sie verursachten Tod, Mitt. a. d. Grenzgeb. d. Med. u. Chir. **38**: 614, 1925.

through embolic injury to the nervous tissues but also as a consequence of direct suppression of kidney function without any likelihood of the usual nephritic degenerative changes. Liver functions may likewise be injured because of fat emboli in the hepatic capillaries. Often the manifestations of fat embolism have doubtless been misunderstood because consideration has been fixed primarily on only one or two organ groups.

DIPHTHERIA IN 1925

The annual diphtheria summary in this issue (p. 1005) affords one of the most encouraging records of recent years in preventive medicine. From 1910 to 1920, little improvement could be demonstrated in diphtheria mortality in most cities. In 1910-1914, only thirteen cities averaged rates under 10; in 1915-1919 and again in 1920-1924, there were only eighteen cities that could be so classed; but in 1924 there were thirty-seven and in 1925 forty-nine with diphtheria rates practically unknown anywhere before 1910. There can be little doubt that the amazing reduction in recent years is to be attributed in large part to the increasing immunization of school children with toxin-antitoxin mixtures or with anatoxin. This conclusion seems warranted, not only by the observations in individual cities like New York where the method has been extensively employed, but by the rapid decline in diphtheria mortality throughout the general population. In 1923, the diphtheria death rate in the large cities of the United States was 13.14; in 1924, it was 11.15, and in 1925, 9.88. Something may doubtless be credited to the curative side, since the use of antitoxin is probably more widespread and more effective each year; but the fact that since immunization measures began to be applied the diphtheria rates, previously almost stationary, have suddenly and decisively dropped indicates that the latter is the main factor. If the improvement of the last three years continues, diphtheria may well be an almost negligible factor in the mortality returns of 1930.

Association News

ANNUAL CONGRESS ON MEDICAL EDUCATION, MEDICAL LICENSURE AND HOSPITALS

Held in Chicago, Feb. 15, 16, 17 and 18, 1926

(Continued from page 958)

State Board of Examiners in the Basic Sciences: Wisconsin's Basic Science Law

MICHAEL F. GUYER, PH.D., Madison, Wis.: The design of the Wisconsin basic science law is not to render unlawful any particular mode of treatment but to insure that those who make an occupation of treating the sick shall have sufficient knowledge of the human body in health and disease to make it safe for them to do so. To prove that they have this knowledge, all candidates for license to treat the sick are required to pass examinations in the four basic sciences of human anatomy, physiology, pathology and diagnosis before they can come before their particular licensing boards. These examinations are conducted, by a board of three members, "not less than four times a year." The present board consists of two biologists and a chemist. The licensing boards are permitted, at their discretion, to accept the basic science certificate in lieu of examination in the subjects of anatomy, physiology, pathology and diagnosis. As the attorney general has ruled that chiropractors from other states are not eligible to reciprocity, the only applicants who can comply with the requirements are those who must also secure their licenses from the state board of medical examiners; hence, as regards reciprocity, the basic science board has for the time being adopted the standards of the medical board as its own. The law further states that "any person who on February 1, 1925, was regularly licensed or registered in the state of Wisconsin to treat the sick need not be registered under the basic science law." This includes not only those who were licensed to practice medicine and surgery or osteopathy and surgery, but also midwives, chiropodists and masseurs. The further specification is added that "any person who, on February 1, 1925, was not registered or licensed in the state of Wisconsin to treat the sick but nevertheless on that date was lawfully engaged in this state in treating the sick shall be registered upon presenting to the board within sixty days after this section goes into effect an application therefor with sufficient and satisfactory evidence that he was on such date lawfully engaged in this state in treating the sick, and is of good moral character, and upon the payment of a registration fee of five dollars."

DISCUSSION

DR. JOHN M. DODSON, Chicago: Not long before I left Wisconsin I chanced to be a member of a committee to secure the passage of an effective medical practice act. I conducted the correspondence. One interesting letter, on a sheet of legal cap paper, bore the legend at the top, "Dr. P. McGillicuddy, M.D., Physician and Surgeon, Dealer in Drugs, Medicines and Notions, also Bees and Honey." You see they were a versatile lot in Wisconsin at that time. The common sense of the present Wisconsin act appeals to the laity, and I think the lack of that feature has been one of the causes of the many failures to secure the right kind of medical practice acts and to enforce them in this country.

DR. A. T. MCCORMACK, Louisville, Ky.: It seems to me that we would be far better off without any laws at all than for the members of a profession to be examined by individuals who are not members of the profession. I believe firmly in an examination by a central body, but I believe that central body ought to represent the profession, and I anticipate with great alarm the time when we sign away our rights and become a profession without intelligent representation on the boards of control.

DR. HAROLD RYPENS, Albany, N. Y.: I do not feel that the bad thing about this law is that laymen give the examination, if they are good examiners. What I object to is that any one who comes from any eligible high school is eligible to take this examination. I look on this as a retrogression to low standard of medical licensure.

DR. T. J. CROWE, Dallas, Texas: You are trying to get through weak and useless legislation.

J. G. CROWNHART, Milwaukee: The profession in Wisconsin was not looking for something to protect the medical profession; on the contrary, it was looking for something to protect the public. This law is enacted not as a licensing measure; it is a negative measure, that you cannot go before any other board until you have passed at least this minimum requirement. It is not an attempt to bring down the standards of medical education; it is simply an attempt to protect the public from pure quackery and fraud.

MICHAEL F. GUYER, PH.D., Madison, Wis.: We do not license anybody or anything; we are a filter, and before anybody can come up before what may be possibly a weaker board than our medical board, like a chiropractor board, he has to pass through our hands. High school men may come before us for examination. That does not mean that we are going to pass them. We try to find out whether they know a little something about the human body and health and disease. We find many of them do not. If they do not, they cannot go before the licensing board. Suppose we did not have such a provision. They would walk over to their chiropractor board, if that was the school in which they were trained, and be licensed to practice chiropractic. As it is now, they have to go through our hands first, and while I am not an authority on chiropractic schools, the material that has

come before us so far has not been material that we could pass.

DR. HAROLD S. RYPENS, Albany, N. Y.: After a chiropractor candidate has passed your board, what would he have to do in way of further examination and study to get his license to practice?

MICHAEL F. GUYER, Ph.D., Madison, Wis.: He would have to pass before a chiropractic board, which is entirely a chiropractic board and distinguished from a medical board. There is a needless alarm over the lowering of standards. The whole object is to put up the standards. We have enough quacks of all kinds and various irregular cults in our own state. They have powerful lobbies back of them. You are up against the same thing. Are you going to let them swing public opinion through negligence of the medical people? The public is not educated up to what is a real, genuinely trained practitioner and what is not. Are you going to let public opinion swing over and get all sorts of licensing boards for these things or are you going to head it off somewhere?

The New Commission on Medical Education: Its Objects and Relation to Medical Licensure

DR. WILLARD C. RAPPLEYE, New Haven, Conn.: The commission is composed of three general groups: (1) those interested primarily in general and graduate education; (2) men interested in medical education proper: fundamental sciences, clinical medicine and premedical education; (3) representatives from both the National Board of Medical Examiners and the Federation of State Licensing Boards. We would be interested in knowing what are the elements of education in a basic course which prepare a man reasonably, safely and adequately to begin the practice of medicine. We are thinking of getting at the basic preparation which will prepare a person to take advantage of the new demands that will come to the medical profession in the next twenty or twenty-five years, and the new demands that come from the public. We recognize that the major problem before medicine today is not education but medical practice. We have started out to get at this question of a basic course in medicine by asking just the question, What is or what should be the general practice in medicine? We are approaching that from the needs of communities for various kinds of medical services. We are studying the actual demands that are now being made on the medical profession in the country, by getting sample experiences of men in general practice in typical communities. In medicine there are a group of questions. Among them are: What are the qualifications of individuals coming up for a medical course? What should be given in the basic course of medicine? By whom should it be given? How should it be given? A study is being made of what is happening to the 10,000-odd applicants for admission to schools of medicine when only about 4,000 are accepted.

DISCUSSION

DR. HOWARD RYPENS, Albany, N. Y.: I think that any legislation that is pending in the various states should be held in abeyance, if possible, until at least some of the results of this very important study have been brought before us.

DR. HENRY A. CHRISTIAN, Boston: One way to study an organization and a machine is to give up studying the methods of the organization of the machine and devote our attention to a study of the product. It seems to me that one important field of this study is going to be this examination of the product. Dr. Rappleye has mentioned one very important phase of that, namely, the study of the problems that confront the physician in communities of different types, communities of different sizes, and so on, as a means of finding out in what we should instruct our students. He has touched on another phase in suggesting the great importance of getting an idea of the future development of the practice of medicine as far as you can anticipate it and preparing the man in part to meet the unexpected demand of that development. Finally, there is one phase of the thing that has always interested me. Certain schools fail to admit men each year and they never pay any attention to finding out what those men accomplish, what becomes of them. Do they keep on studying medicine? Do they go to some other school? If, so, do they succeed or do they not succeed? This survey is going to help us along those lines.

DR. LOUIS B. WILSON, Rochester, Minn.: I have great faith in the board as it is constituted to arrive at a fair knowledge of the medical profession, as to what it is doing and what it ought to do, how well prepared it is and how ill prepared it is to do the work.

DR. JOHN M. DODSON, Chicago: It seems to me that the commission might very well consider as part of its work ways and means of educating the laity. We have framed legislation and put it on the books, but we have not convinced the public that they need it. Until we do that we might just as well not pass legislation at all. The solution of most of our ills is education of the people concerned.

(To be continued)

THE DALLAS SESSION

Multiple Reservations at Dallas

The Dallas Chamber of Commerce complains that many physicians who expect to attend the Dallas Session have made reservations at more than one hotel, and that even when notified by all the hotels concerned that such reservations have been made, none of them have been released. Such procedure is manifestly unjust and seriously complicates the hotel situation in Dallas. Of course, the hotel has to accept all requests for a reservation in good faith, and when one physician makes reservations at more than one hotel, some other physician who wishes to attend the Annual Session at Dallas has his chances for securing satisfactory accommodations reduced accordingly. All who have made more than one reservation are urgently requested to release immediately those reservations which will not be used.

Those who have not yet secured reservations at Dallas should write at once to the Dallas Chamber of Commerce. All possible effort will be made to have satisfactory accommodations for all who will attend the Annual Session.

A. M. P. O. Luncheon

Dr. Ramsey H. Moore, Medical Arts Building, Dallas, is the chairman of a committee in charge of arrangements for the annual A. M. P. O. luncheon, to be given during the annual meeting of the American Medical Association.

Motion Picture Theater

An exceedingly attractive program affords opportunity for many who come early to attend features of special interest in the Motion Picture Theater. The Motion Picture Theater opens at noon on Monday (as does also the Scientific Exhibit) and will operate also on Tuesday from 9 a. m. to 5:30 p. m., as well as on Wednesday, Thursday and Friday. Also those who wish to attend only section meetings on Wednesday, Thursday and Friday will find it an advantage to come early to the meeting in order to hear these talks on Monday and Tuesday.

Scientific Exhibit

The United States Public Health Service is actively engaged in making arrangements for the coordinating Immunologic Exhibit on vaccination. Dr. J. P. Leake is in charge and will demonstrate various types of "takes" as well as the technic of vaccination. In addition, the United States Public Health Service will have a comprehensive exhibit of its general work. The Division of Venereal Diseases will demonstrate its work, and the Division of Marine Hospitals will show the investigations in leprosy.

Wounded Prisoners of War.—The *Archives médicales belges* comments on the work accomplished by Switzerland in interchanging prisoners of war that were incapacitated by wounds or disease and interning others. The interchange arrangement allowed the return to their homes through Switzerland of 10,000 wounded French, British, Belgian or German soldiers, and in all, 75,000 soldiers were interned during the war. There were twenty different centers for the accommodation of the interned. Two Swiss committees passed on the recommendations made by the Red Cross for repatriation.

Medical News

(PHYSICIANS WILL CONFER A FAVOR BY SENDING FOR THIS DEPARTMENT ITEMS OF NEWS OF MORE OR LESS GENERAL INTEREST: SUCH AS RELATE TO SOCIETY ACTIVITIES, NEW HOSPITALS, EDUCATION, PUBLIC HEALTH, ETC.)

ALASKA

Hospital Boat on the Yukon.—The governor of Alaska announced, March 26, that a well equipped hospital boat with a physician and two nurses on board will be put in service this year on the Yukon River and its tributaries, to minister to about 5,000 persons who would otherwise be without medical service. Most of the natives live along the banks of these streams.

CALIFORNIA

Personal.—Dr. Alexander W. Pollock, recently of Ontario, Calif., has accepted an appointment as a medical missionary to Abyssinia, to replace Dr. Thomas A. Lambie, who will return to this country on furlough. Dr. Pollock was a medical missionary in Egypt for many years.——Dr. William P. Byron has been appointed health officer of Lemoore in Kings County to succeed Dr. William F. Edmonds.——Dr. Paul E. Bowers, Los Angeles, has been elected president of the Southern California Academy of Criminology.——Dr. F. Leslie Herrick, Oakland, has been appointed assistant surgeon of the Napa State Hospital.——Dr. Francis F. Malone has been appointed health officer of Calipatria in Imperial County.

Lectures on Diseases of the Pacific Basin.—Dr. Henry S. Houghton, director of the Peking Union Medical College, Peking, China, will deliver the first course of two lectures under the Morris Herzstein lectureship on diseases of the Pacific Basin including tropical diseases, during the week beginning April 25 at Lane Hall, Stanford University School of Medicine, Sacramento Street near Webster, 8 p. m. In his first lecture Dr. Houghton will discuss the setting of western medicine in Asia and its significance in promoting international well being. The second lecture will be on nosogeography and on work that is being done in China. Physicians and all medical students are invited to attend.

Smallpox Kills 125.—In its weekly bulletin, the California State Board of Health again calls attention to the type of smallpox that prevails in the state, saying that in the first seventy days of this year, more people died of smallpox in California than during the years 1923, 1924 and 1925; between January 2 and March 13, there were 1,449 cases reported and 125 deaths. Los Angeles County suffered most; the city of Los Angeles had 636 of the cases and 108 of the deaths. The state board considers that the facts concerning the prevention of smallpox by vaccination are too well known for any individual to plead ignorance and that the responsibility for contracting smallpox now rests entirely on the individual; health officers seem to have done all that they can to encourage the continuous exercise of vaccination.

DELAWARE

University News.—Henry C. Sherman, Sc.D., professor of food chemistry, Columbia University, New York, lectured at the University of Delaware, February 16, on "Recent Advances in the Chemistry of Nutrition."

Health at Wilmington.—Telegraphic returns to the U. S. Department of Commerce from sixty-eight cities with a total population of 29,000,000, for the week ending March 6, shows that the highest mortality rate (32.5) was for Wilmington, Del., and the general mortality rate for the group of cities was 16.2; for the corresponding week of last year the mortality rate for Wilmington was 14.5, and for the group of cities as a whole, 14.6.

FLORIDA

Smallpox in Tampa.—The Tampa *Tribune* noted, March 7, that a total of 279 cases of smallpox had been reported in that city since the recent outbreak occurred, and that thirty-four of them were reported the previous week. There were then, it is said, a total of fifty-one cases in the city. There is a free vaccination clinic in the city hall. Dr. Ernest C. Levy, health officer, said that although about 50 per cent of the population of Tampa had been vaccinated, if the people do not cooperate with the health department in rounding up those who have neglected vaccination, smallpox will continue to be reported. Dr. Levy will also be head of the sanitary department by virtue of a new ordinance, which merges the health and sanitary departments under one head.

IOWA

Annual Clinic.—Physicians are invited to attend the annual clinic of the College of Medicine of the State University of Iowa at Iowa City, April 13-14; the clinic will be conducted by Dr. Campbell P. Howard, formerly professor of medicine at the state university and now at McGill University Faculty of Medicine, Montreal, and by Dr. McKim Marriott, dean and professor of pediatrics at Washington University School of Medicine, St. Louis.

Research in Cerebral Physiology.—Under the direction of Dr. Samuel T. Orton, director, Iowa Psychopathic Hospital, and head of the department of psychiatry, State University of Iowa, a two years program in research in cerebral physiology is being undertaken at the university, for which the Rockefeller Foundation has made a grant of $60,000. Two groups are at work; one, a field unit, holds psychiatric clinics in small communities to locate problem material; the other is the laboratory unit, consisting of the director and his executive assistant, an associate in neuro-anatomy and pathology, an assistant in neurophysiology, a teacher to work on methods for the corrections of disabilities, a research associate of the National Research Council, and a secretary; all of these give full time except the director. The general plan is to work on problems of "cerebral dominance" by studying cases of special disability in reading, writing and speech; to analyze the literature of cerebral anatomy and physiology, and to conduct experiments on animals.

LOUISIANA

Invitation to Visit en Route to Dallas.—The Ouachita Parish Medical Society extends a general invitation to members of the American Medical Association to attend the annual meeting of the Louisiana State Medical Society, which will be held in Monroe, April 15-17. This society will be pleased to entertain at this meeting members of the American Medical Association who are en route to Dallas.

Personal.—Dr. David A. Lines, collector of internal revenue for the department of Louisiana, has resigned, effective April 30, and will engage in the practice of medicine.——Dr. Leonard C. Chamberlain has been elected president of the clinical staff of the Presbyterian Hospital, New Orleans, succeeding Dr. Euclid J. Richard.——Dr. David E. Brown, Chatham, has accepted a position with the Louisiana State Board of Health as director of tuberculosis control.

MARYLAND

Personal.—Dr. Charles C. Hedges, U. S. public health director for Marshall County, W. Va., has accepted the position of second assistant director at the Johns Hopkins Hospital, and will be in charge of the dispensaries; he succeeds Albert W. Buck, who resigned to become director of the New Haven Hospital, New Haven, Conn.——Dr. Robert H. Riley, acting director of the state department of health, is making a study of state health work in North Carolina, South Carolina, Alabama and Tennessee.

Physician with Arctic Expedition.—Dr. Daniel O'Brien of the Johns Hopkins Hospital, left Baltimore, March 31, to join the arctic aerial expedition in command of Lieut. Comdr. Richard E. Byrd, Jr., U. S. Navy, retired, which sails from New York, April 2, for Spitzenbergen. Dr. O'Brien was head of the Grenfell expedition to the coast of Labrador in the summer of 1920; he graduated from Yale and the Johns Hopkins Medical School and served in the army during the World War, and spent two years in Egypt and the Near East; except for the Labrador expedition, he has been on the staff of the biologic department of the Johns Hopkins Medical School since returning from the Mediterranean countries.

MICHIGAN

Personal.—Dr. George F. Inch has been appointed general medical superintendent of the state hospital at Traverse City, and Dr. Roy A. Morter has been appointed assistant medical superintendent of the state hospital at Kalamazoo, to succeed Dr. Inch. Dr. Morter has been on the staff of the Kalamazoo Hospital a number of years.——Dr. Pitt H. S. Wilson, Muskegon, has been elected president of the Muskegon County Tuberculosis Association.

Instruction in Health.—Dr. William R. P. Emerson, Boston, will conduct a nutrition and public health institute at Grand Rapids, April 5-18, under the auspices of the Grand Rapids Child Health Bureau. There will be conferences and classes daily for (1) public health nurses; (2) members of the parent-teacher association, and (3) other interested groups. There will be demonstrations especially for teachers in the afternoon and a lecture every evening. Dr. Clyde C. Slemons, health officer, is general chairman of the committee in charge; one hour of college credit will be given those who complete the course and supplement the work with collateral reading. The subjects will cover social and mental hygiene, child behavior, child guidance, public health nursing, and home economics.

MISSOURI

Society News.—The Trudeau Club, St. Louis, will furnish the program, April 27, for the St. Louis Medical Society, and will present the modern conception of tuberculosis diagnosis and treatment; among the speakers will be Dr. Adelheid C. Bedal, whose subject will be "The Diagnosis of Concealed Tuberculosis;" Dr. Evarts A. Graham, "Thoracoplasty in the Treatment of Pulmonary Tuberculosis," and Dr. Joseph W. Larimore, "The Diagnosis and Treatment of Gastro-Intestinal Tuberculosis."

Donors for Blood Transfusion.—A committee of the Community Council of St. Louis is making a permanent list of donors for blood transfusion; sixty-seven persons have responded to the call. It is hoped that the list will be increased to 100, and that negroes as well as Caucasians will volunteer. The donors are being examined to rule out disease and to have their blood typed. The names of those accepted will be certified to the Central Nurses Registry; they will be placed at the service of all hospitals and reputable physicians in the city; eight hospitals are represented on the committee at present. It is planned to give donors a fee of $25; many have offered their services free of charge.

NEW JERSEY

Warning.—Prescription Books.—A correspondent writes that a well dressed man has visited the offices of several physicians in Newark, recently, when the doctors were out, and asked permission of the attendants to leave a note on the doctor's desk. When these physicians returned, they found that their liquor prescription books were missing.

Society News.—Dr. Richard A. Kern, associate professor of medicine, University of Pennsylvania School of Medicine, Philadelphia, addressed the Atlantic County Medical Society, Atlantic City, February 12, on "The Diagnosis and Treatment of Hay-Fever."——The Bergen County Medical Society, Hackensack, passed a resolution at its February meeting thanking the board of freeholders for its efficiency in keeping the county roads clear in spite of heavy snowfalls.

NEW YORK

Veterans' Hospital at Northport.—The director of the U. S. Veterans' Bureau has planned to construct a 1,000-bed fireproof hospital at Northport, L. I., on about 550 acres of land, which will comprise about twenty-five buildings and cost about $3,000,000. Construction will start early this spring.

Appointments and Promotions at State Hospitals.—The following appointments and promotions at state hospitals were reported in the February number of the *State Hospital Quarterly:*

Dr. Katherine C. Brockman, appointed assistant physician in Kings Park State Hospital.

Dr. Bernard J. Dolan, appointed assistant physician in Buffalo State Hospital.

Dr. J. B. Ferran, Jr., assistant physician in Binghamton State Hospital, promoted to senior assistant physician.

Dr. Ross D. Helmer, appointed medical director at Marshall Sanitarium, Troy, N. Y.

Dr. William E. Kelly, senior assistant physician in Middletown State Homeopathic Hospital, promoted to pathologist.

Dr. Louis F. LeSoine, assistant physician in Hudson River State Hospital, promoted to senior assistant physician.

Dr. Paul Levi, appointed assistant physician in Gowanda State Homeopathic Hospital.

Dr. Paul C. Lybyer, assistant physician in Hudson River State Hospital, promoted to senior assistant physician.

Dr. Christopher J. Patterson, appointed assistant physician in Hudson River State Hospital.

Dr. Albert Slutsky, appointed assistant physician in Kings Park State Hospital.

Dr. Ernest S. Steblen, assistant physician in Binghamton State Hospital, promoted to senior assistant physician.

Dr. Harry A. Steckel, senior assistant physician in Binghamton State Hospital, promoted to clinical director.

Dr. Nellie N. Tilton, assistant physician in Hudson River State Hospital, appointed assistant physician in Middletown State Homeopathic Hospital.

Dr. August E. Witzel, senior assistant physician in Utica State Hospital, transferred to the position of director of clinical psychiatry in Brooklyn State Hospital.

Dr. Claude R. Young, assistant physician in Binghamton State Hospital, promoted to senior assistant physician.

New York City

Seventh Harvey Lecture.—Dr. B. Brouwer, professor of neurology, University of Amsterdam, will deliver the seventh Harvey Lecture, April 17, in the evening, at the New York Academy of Medicine, on "Comparative Anatomy and Nerve Pathology."

Measles Serum Wanted.—The department of health will send an official to secure a specimen of blood for convalescent measles serum to any patient from whom the attending physician has obtained consent, and will reserve for the physician who obtained consent, a supply for his future use; from $10 to $25 will be paid to a poor patient who wishes to be paid for the specimen. The health department has been using convalescent serum as a prophylactic measure in infants exposed to measles during the last four years. The supply has been limited; recently, to obtain serum that it might be offered to a larger number of practicing physicians, the department sent a representative to Kentucky, there having been an epidemic of measles in the University of Berea, where for a small sum, sixty students were willing to contribute specimens; the expense entailed was paid by a New York life insurance company.

Hospital News.—The health commissioner, Dr. Louis I. Harris, in an address before the New York Visiting Committee of the State Charities Aid Association, March 4, deplored the condition of the city hospitals; he said, according to *New York Medical Week*, that "our hospitals today stand as a monument to things outgrown." The condition was attributed to old cement buildings which do not permit the installation of elevators and scientific administration. There are in some of the hospitals, it appears, "dirty kitchens" with adjacent "garbage heaps"; patients still have to cross the East River in old, open boats, subject to delay and exposed to the cold. Riverside Hospital was especially mentioned.——The Flushing Hospital Corporation, Flushing, has voted to begin a campaign, May 1, to raise $750,000 to enlarge the institution, for which a plot of ground has been secured at Elm Street and Parsons Boulevard.——Montefiore Hospital will build a new sanatorium for tuberculosis patients in the spring on the site of its present institution at Bedford Hills in Westchester County; the sanatorium will cost $1,500,000 and will accommodate 230 patients.

OHIO

Influenza at Cleveland.—Three hundred and fifty teachers were absent from the public schools of Cleveland, March 22, it is reported, largely because of an epidemic of influenza, which, it was said, also was largely responsible for the absence of about 12,000 pupils.

Miscellaneous Items.—The Toledo Safety Council has completed arrangements to equip all taxicabs with first aid kits.——Dr. Guy H. Swan has announced his retirement from active practice.——The children's building of the Clark County Tuberculosis Sanatorium will not open this year as planned, on account of a lack of funds.——A drive to raise a half million dollars in Akron to construct a children's hospital is expected to open this month.——Official charity in Ohio last year cost $9,572,470.35, the greater part of which was spent for the maintenance of the twenty-four state institutions.——Dr. William A. Koch of Bucyrus was fined $500 and costs in federal court, March 8, it is reported, after pleading guilty to a charge of issuing liquor prescriptions without having made a physical examination.——A group of citizens of Marion have presented an automobile to the city health department for the use of the "city health nurse."

PENNSYLVANIA

The Bedford Lecture.—Dr. Beverly R. Tucker, Richmond, Va., will deliver the Bedford Lecture, April 8, at the Duquesne Club, Pittsburgh, 7 p. m., on "The Doctor's Contribution to Literature." Members of the Allegheny County Medical Society are invited. Reservations for the dinner preceding the lecture can be made by calling Mrs. Risacher, Grant 0400.

Westmoreland County Annual Clinic.—The fifth annual clinic and banquet of the Westmoreland County Medical Society will be in Greensburg, May 6. The clinic will be at the

New Armory in the afternoon, and the banquet at the Country Club in the evening. Adjacent county medical societies are cordially invited to both functions. Dr. Elliott P. Joslin, clinical professor of medicine, Harvard University Medical School, Boston, and Dr. Frank H. Lahey, Boston, will conduct the clinic.

Personal.—Dr. and Mrs. William C. Mitchell celebrated their fiftieth wedding anniversary at a reception at the Hotel Rittenhouse, recently.——Dr. Edwin Bosworth McCready, Pittsburgh, addressed the Academy of Medicine of Richmond, Va., March 11, on "Nervous, Backward and Delicate Children."——Dr. Herbert H. Holderman, Philadelphia, has been elected chief surgeon at the new Locust Mountain Hospital, which has been in the process of construction for about ten years, it is reported. The state department of health will announce the opening date of the hospital within a short time.——Dr. Park A. Deckard has been appointed chief of the department of dermatology at the Harrisburg Hospital; Dr. Allen B. Dalton, Chester, has been appointed chief resident at the hospital.——Dr. George A. Reed has been elected president of the Erie Anti-Tuberculosis Society, to succeed the late Edward P. Selden.——Dr. William L. Steen has been reappointed health officer of New Castle.

Philadelphia

Personal.—Dr. Benjamin Lipshutz has been appointed attending surgeon of the Mount Sinai Hospital, Philadelphia. ——A testimonial dinner, March 23, was given in honor of Dr. Francis Edward Stewart by the faculty of the Philadelphia College of Pharmacy and Science and friends.—— The Medical Club of Philadelphia will give a reception in honor of Dr. Francis B. Haas, superintendent of public instruction of Pennsylvania, at the Bellevue-Stratford Hotel, April 16.

Society News.—Among others, Dr. Pascal Brooke Bland addressed the Northern Medical Association of Philadelphia, March 15, on "The Newer Advances in Obstetrics," and Dr. John F. Sinclair on "The Care of the Premature New-Born."——Dr. Francis Carter Wood, Columbia University College of Physicians and Surgeons, New York, addressed the Philadelphia County Medical Society, March 24, on "The Cause of Cancer with Special Reference to the Gye-Bernard Work"; Dr. John A. Kolmer, Dr. Jay F. Schamberg and Malcolm J. Harkins, on "Concerning Gye's Hypothesis of the Etiology of the Malignant Tumors," and Dr. George E. Pfahler, on "Present Value of Physical Agents in Treatment of Malignant Diseases."——Dr. Albert C. Buckley presented a case of chorea in the seventh decade with apparent recovery before the Philadelphia Neurological Society, March 26, and among others, Dr. Abraham M. Ornsteen discussed "Differences in Muscle Contraction in Peripheral and Central Facial Paralysis."

RHODE ISLAND

Dr. Scamman Resigns.—Dr. Clarence L. Scamman, deputy superintendent of health of Providence, resigned, April 1, and has accepted an appointment as deputy commissioner of health and director of the division of communicable diseases of Massachusetts; he has been with the Providence Health Department about four years. Dr. Scamman will also lecture at the Harvard University School of Hygiene, it is reported.

TEXAS

Dr. Hartman Appointed Acting Dean.—The Board of Regents of the University of Texas has appointed Dr. Henry C. Hartman, professor of pathology at the university, as acting dean of the medical school, to succeed Dr. William Keiller, who has remained on duty since tendering his resignation to the board last May. Dr. Keiller has been associated with the university as professor of anatomy, since 1891. Dr. Hartman has been associated with the pathology department of the university since 1908, and has been professor of pathology since 1913; he was formerly assistant state health officer and state bacteriologist; he served in the navy during the World War (THE JOURNAL, June 6, 1925, p. 1757).

WASHINGTON

Virulent Smallpox.—It was reported March 22, that eighty-four cases of virulent smallpox and twenty deaths had been reported in Seattle since January 21; about 25,000 persons in the city had been vaccinated in the last month.

WEST VIRGINIA

Society News.—The West Virginia Newspaper Publishers' Association voted unanimously at the annual meeting in Wheeling, February 12, to support the West Virginia State Medical Association in its campaign to educate the public in matters of health; Mr. Sterrett O. Neale, executive secretary of the medical association, among others, addressed the meeting.——Drs. Merrick F. McCarthy and William L. Shannon, Cincinnati, addressed the Kanawha County Medical Society, recently, on "Vertigo" and "Diagnostic and Prognostic Significance of Precordial Pain," respectively; the program for the February 2 meeting was a symposium on empyema by Drs. Robert Douglas Roller, Jr., Arthur A. Shawkey and John E. Cannady of Charleston.——The Barbour-Randolph-Tucker Medical Society authorized the secretary to provide the four members of the legislature and three members of the state senate with subscriptions to *Hygeia*, a journal of individual and community health, published by the American Medical Association.——Dr. John P. Griffith and James D. Heard, both of Pittsburgh, addressed the Ohio County Medical Society on "Ulcer of the Stomach and Duodenum" and "Prevention and Relief of Heart Disease," respectively.

GENERAL

Annual Dinner of Camp Merritt Officers.—The annual dinner of the Camp Merritt Base Hospital Officers' Association will be held, Saturday evening, April 10, at the Princeton Club, Park Avenue and Thirty-Ninth Street, New York City. Brig. Gen. James L. Kennedy, who, during the World War, was surgeon of the Port of Embarkation, Hoboken, N. J., and who now is assistant surgeon general of the army, will be the guest of honor.

Society of Medical Hydrology.—The International Society of Medical Hydrology will visit Czechoslovakia, and persons who would like to join the party should apply at once to the Honorary Secretary, 36 Devonshire Place, London, W. I., England; April 16 will be spent at Karlsbad; the party will then go to Marienbad, Franzenbad, Prague, where there will be a reception, Pistany, and, April 21, to Tatra Spas; at each place there will be scientific meetings.

Women Physicians.—Dr. Leora G. Bowers, Dayton, Ohio, president-elect of the Ohio State Medical Association, recently addressed the eighth councilor district at Lancaster on "Education for the Physician of the District."——Dr. Josephine Milligan, Jacksonville, Ill., has been elected president of the Morgan County Medical Society.——Dr. Florence M. Olmsted has been elected president of the board of health of Kokomo, Ind.——Dr. Esther Loring Richards, associate professor of psychiatry, Johns Hopkins University Medical School, Baltimore, recently addressed the annual meeting of Infant Welfare Society of Chicago on "Child Behavior."

Sanitary Regulations for Garages.—Tentative regulations for the manufacture and use of tetra-ethyl lead gasoline and for the sanitation of garages have been made by the Surgeon General of the U. S. Public Health Service and submitted to health officers of the various states for comment and suggestions. In formulating these regulations, the Surgeon General intends to establish approved standards of health in the manufacture and handling of dangerous chemicals. During the recent investigations of the public health service of the health hazard in the use of tetra-ethyl gasoline, it was found that lead was present in the dust of ordinary garages. There are thousands of garage workers throughout the country; the extent of this health hazard is apparent and the necessity for sanitary regulation is obvious.

Tables at Woods Hole.—The biologic laboratories of the U. S. Bureau of Fisheries at Woods Hole, Mass., Beaufort, N. C., and Fairport, Iowa, will open June 21, and remain in active operation until September 15. Owing to the increased demand for accommodations at Woods Hole, it is necessary to use more care in the selection of those who work at the laboratory; preference will be given to investigators who work along the lines of especial interest to the bureau of fisheries and who have shown ability for energetic and productive research. There is a new and well equipped laboratory at Fairport, Iowa, with collecting apparatus, ponds and tanks. Workers desiring to have the use of tables and other facilities at these laboratories may communicate with Henry O'Malley, Commissioner of Fisheries, Washington, D. C.

American Association for Medical Progress.—During 1925, the American Association for Medical Progress received requests for lectures from all parts of the country; it was

possible to send a representative to speak in twenty-five cities in eleven states, and to confer with the deans of medical schools, health officers, heads of educational and research institutions and city superintendents of schools. The association distributed about 98,000 pamphlets to the public and its members, and the lay press published announcements and news items regarding medical discoveries and editorials about the work. There was interest in different parts of the country in the formation of local branches of the association, and one active branch was established at Santa Barbara, Calif. An obstacle to the formation of local branches is the problem of adequate division of financial responsibility, particularly where groups interested in health and related problems are affiliated through "community chests" or similar agencies; another obstacle arises from the desire of the association to be uninfluenced by the medical profession, since voluntary health organizations are in close cooperation with physicians in practically all cities. The association took no active part in 1925 in promoting or opposing legislation. The board of directors voted to raise the dues for associate members to $2 and to establish a class of special members, with an annual payment of $1 for teachers, trained nurses and associate workers. The Beth Israel Hospital, New York, voted to subscribe $1,000 a year for the work of the association and to designate five of their number as members. The activities of the year consisted largely, therefore, in making contact with interested groups in various parts of the country, in distributing printed material, in getting information into the newspapers, and in surveying the needs for further work.

News of Epidemics.—The recent epidemiologic reports note especially outbreaks of influenza; some state that the incidence of influenza is equal to or greater than in the pandemic of 1918; business houses and the public schools in some communities report many absentees, and some schools have closed. The severity of the epidemic, generally, has been reported as mild, although the number of deaths from pneumonia, which normally is high at this season, has been increased; for example, eighty-seven persons were reported to have died from influenza in New York City the week previous to March 21, and 608 persons died from pneumonia; this was said to be the greatest weekly number of deaths since the outbreak began. The rates of incidence and mortality of influenza in the army are noted in this issue under Government Services.——Several cases of cerebrospinal meningitis and one death were reported from Boise, Ida., March 20.——A new outbreak of three cases of smallpox occurred at Rockford, Ill., March 12; several cases of smallpox were reported from Mansfield, Ohio, March 18.——One hundred and seventy-six new cases of measles were reported during the week ending March 14, at Saginaw, Mich., bringing the total number under quarantine in the city to about 300; there had been 456 cases of measles reported in Louisville, Ky., between February 1 and March 15.——Grand Rapids, Mich., reported 308 cases of whooping cough for the month of February, as compared with eleven cases for February last year.——The secretary of the Indiana State Board of Health issued a warning, early in March, concerning the prevalence of rabies in Indiana, stating that seventy-nine persons who had been bitten by rabid dogs since Oct. 1, 1925, had been treated by the state laboratory, and that in the week preceding his report, five cases of rabies from different parts of the state had been identified through the examination of the brain of animals received at the laboratory.

CANADA

Tuberculosis Research.—Dr. Auguste Pettit of the Pasteur Institute, Paris, has accepted an invitation to take charge of the tuberculosis research work to be carried on at the University of Montreal, in connection with the dominion-wide program, planned by the Research Council of Canada. The details of the program at the University of Montreal will not be arranged until Dr. Pettit arrives; the university will have the medical and scientific direction of the hospital being erected at Cartierville, in which 200 beds will be allotted for tuberculosis patients. The other center of tuberculosis research in the Canadian program will be at the University of Toronto.

Extramural Postgraduate Work.—The Canadian Medical Association has appointed two committees for the purpose of organizing extramural postgraduate instruction, one for the province of Quebec, the chairman of which is Dr. Rodolphe Boulet, and the other a central postgraduate committee for the remainder of Canada. The latter committee is engaged in making a schedule of lectures in cooperation with the provincial associations and universities. There is interest, generally, in this work, the general secretary of the association observed in recent visits throughout Canada. The profession is being organized into sectional groups, which are ready to welcome the visiting speakers, and funds to the extent of $30,000 for one year have been received through a gift of the Sun Life Insurance Company.

LATIN AMERICA

Personal.—The *Repertorio de Medicina* of Bogota states that Dr. Miguel Jiménez López has been appointed minister from Colombia to Berlin, and Dr. Vergara Rey secretary to the Colombian legation, while Dr. Jorge Bejarano has been appointed secretary to the Colombian legation at Paris.——The national public health authorities, faculty of medicine and medical societies of Bogota joined in a tribute to Dr. Juan David Herrera, Bogota, on the completion of his fiftieth year of practice, presenting him with an illuminated parchment testimonial.——The past and present pupils of Dr. García Valenzuela, professor of physiologic chemistry at the university of Santiago de Chile, gathered on the occasion of his retirement from the chair he has held for thirty years to pay him honor and recall his contributions to chemistry and histology.——The *Clínica* states that Dr. E. Prado Tagle, president of the Santiago Medical Society, and many of the members are working industriously to organize the profession in Chile into a medical syndicate to study ways and means to promote the material welfare of the profession.——Dr. B. Galindez, president of the Círculo Médico of Cordoba, has inaugurated a campaign against quacks, urging physicians throughout the province to obtain authentic proof of quack practices and injury therefrom so that collective data can be presented to the courts. The organized lawyers are working to have the laws modified to expedite legal relief from the plague of quackery.

FOREIGN

Competition in First Aid Supplies.—The international committee of the Red Cross is to hold at Geneva a competitive exhibition of litters, litter holders, cards for the wounded, and individual first aid packets. Specimens of the competing articles should be sent with full description to the organizing committee, promenade du Pin, 1, Geneva, Switzerland, before June 30, 1926.

League for Sexual Ethics.—The *Wiener klinische Wochenschrift* states that the society organized by Prof. E. Abderhalden, Halle, entitled the Medical League for Sexual Ethics, has been reorganized as a general society to include laymen, and to enlarge the scope of the work to include professional and social ethics. The name of the journal published by the society is *Ethik, Sexualethik und Gesellschaftsethik*. The official name of the society is now the Aerzte- und Volksbund für Sexual- und Gesellschaftsethik, with headquarters at Magdeburgerstrasse 21, Halle.

Personal.—Drs. Moureu and Fourneau have been appointed to represent the French Académie de médecine at Paris in the Italian congress on pure and applied chemistry, to be held at Palermo in May.——A gold medal was recently presented to Dr. Angel Pulido, honorary director of the *Siglo Médico*, Madrid, perpetual secretary of the Academia Nacional de Medicina, by the Colegio de Doctores of the University of Madrid, in tribute to his services to medical science.——The Urologic Society of Vienna has elected Dr. A. Pulido Martín, Madrid, as honorary member.——Dr. Henry Plotz of the Pasteur Institute, Paris, France, has been made a foreign member of the Société de pathologie comparée.

New Clinical Research Laboratory in Australia.—A new building for the department of biochemistry at the Alfred Hospital, Queensland, Australia, said to equal any of its kind in Great Britain, was formally opened, January 22, by Dr. M. T. MacEachern of Chicago, who is in Australia surveying the hospitals. The new laboratory has nine rooms and is in charge of Dr. A. Basil Corkill. The upkeep of the department has been assured for five years by Mr. T. Baker, who intimated that if the department "makes good" his support would not be withdrawn at end of that period. Although now designated as a biochemical laboratory, the intention is to broaden its scope, so that it will be a clinical research institution.

Deaths in Other Countries

Dr. H. Kantor, who for thirty years from his home in Warnsdorf, Bohemia, waged a valiant fight against quackery, founding and publishing the *Gesundheitslehrer*, a special organ to combat medical fakers, aged 67. One of our German

exchanges says, "All that has been accomplished here in recent decades in the fight against quackery is due mainly to Kantor."——Dr. **I. Bandi,** professor of hygiene and colonial pathology, Naples, and founder of the Istituto siero-vaccinoterapico, aged 59. Dr. **Arthur Robertson Cushny,** professor of materia medica and pharmacology, University of Edinburgh, died suddenly at his home in Edinburgh, February 25, of cerebral hemorrhage, aged 60. Dr. Cushny was formerly professor of pharmacology at the University of Michigan, Ann Arbor, from 1893 until 1905, and professor of pharmacology at University College, London, from 1905 to 1918. He was the president of the Section of Pharmacology and Therapeutics of the British Medical Association in 1910, and for years a member of the Scientific Grants Committee of that association. He was the author of a well known textbook on "Pharmacology and Therapeutics or the Action of Drugs"; his name is particularly associated with his work on the action of digitalis.——Dr. **Michael Francis Cox,** president of the Royal College of Physicians of Ireland in 1922, and a member of the privy council; senior physician to St. Vincent's Hospital, Dublin.——Dr. **John B. Story,** president of the Royal College of Surgeons in Ireland from 1918 to 1920, and president of the Ophthalmological Society of the United Kingdom, professor of ophthalmic surgery to the Royal College of Surgeons in Ireland, president of the Irish Medical Association in 1913, and surgeon oculist to the king in Ireland.

Government Services

Influenza in the Army

Influenza appeared in the army in mild epidemic form in January and increased in extent in February, the rates of incidence being 97.26 and 158.21, respectively. Influenza was more prevalent in February of this year, the Surgeon General's Office says, than during February of 1921, 1924 and 1925, but less prevalent than in February of 1920, 1922 or 1923. Up to February 20, no stations on the New England Coast or the Pacific Coast had reported an unusual number of cases of influenza, but stations in other parts of the country reported outbreaks. Fort Slocum, N. Y., had up to February 27 the most serious outbreak, with 286 cases and twenty-two cases of pneumonia. The most reliable indication of the severity of these outbreaks of influenza, the Surgeon's General's Office says, is the relative number of cases of pneumonia. The combined rate from the pneumonias in January was 5.20 and in February 7.69, which was considerably higher for January than during the corresponding month in 1925 (3.32), or in 1924 (3.52), but lower than in 1923 (5.33); it was lower, however, during February, 1926 (7.69) than in February, 1925 (8.84). It is apparent, it is said, that the army has had a rather extensive epidemic of influenza, but that it has been relatively mild.

Veterans' Bureau Medical Corps

An amendment to the World War Veterans' Act for the creation of the U. S. Veterans' Bureau Medical Service, which shall consist of a medical corps, a medical reserve corps and a nurse corps, has been approved by the house committee on World War veterans' legislation and is now on the calendar of the present Congress. Legislation of this character has for more than two years been under consideration by the Veterans' Bureau and has been the occasion for conferences by the director of the bureau, with members of Congress and President Coolidge. The object is to stabilize the medical personnel of the Veterans' Bureau. An important provision of the amendment is that "every person under the provisions of this act shall receive an increase of 5 per cent of the base pay for the period in which he is serving for each three years of service up to thirty years." In computing such service for members of the medical corps, there shall be counted the service of physicians in the U. S. Veterans' Bureau since Aug. 9, 1921, and all service on active duty in the medical service of the U. S. Veterans' Bureau. Provision is also made that each member of the medical corps, on active duty, shall be entitled to a money allowance for subsistence and for the rental of quarters, where public quarters are not available. The amendment is drawn along lines identical with those for the medical personnel of the army and navy. The present indications are that the war veterans' bill, which includes this amendment, will be passed at this session of Congress.

Foreign Letters

LONDON

(From Our Regular Correspondent)

March 6, 1926.

Lord Dawson on Osteopaths

Lord Dawson of Penn, physician to the London Hospital, addressed a meeting of members of both houses of parliament at the House of Commons on "The Medical Profession, the General Medical Council, and the Public." The meeting was organized by "the Parliamentary Medical Committee" (physicians who are members of parliament). He said that the merits of the subject had become obscured by personal grievances and heated comment. At present there was considerable criticism of the medical profession, and there were not a few suggestions that the physicians were actuated by selfish motives. Their critics misunderstood them. He asked them to contemplate the physician's life—his long hours, his sacrifice of ease and leisure, his contact with other people's troubles. Was it likely that such men would pursue a selfish policy? True, they had their foibles. They did not like a man who thought he had made a discovery making a secret of it; and if they found that associated with that secrecy there was gain, they claimed the right to cast him from them. This illustrated that in their ideals they put achievement before money. They liked their men, especially if they were successful, to give up some of their time to unremunerative work for the public good—it might be work in the wards of hospitals, in free clinics of their own, or in research laboratories. Further, they were philanthropic enough to inculcate principles of health which, if they were carried out, to a large extent would deprive them of their practices. It was a fortunate circumstance that the public did not always incline to follow their advice, and, therefore, the physicians were still in being. He laid down two guiding principles: (1) The good of the public should ever be the overriding consideration; and (2) the medical profession should use knowledge in whatever quarter it could be found, provided it was for the benefit of the people. They in no way contemplated that unqualified practice should be forbidden by legal enactment. They were concerned with whether it should receive recognition by the state and the medical profession. The necessary preliminary to the treatment of disease was knowledge of disease. To get this knowledge, the members of the medical profession went through five and one-half years' training. This training was necessary, whatever the physician's line of practice might ultimately be. It would be criminal in the interests of this nation to make the smallest compromise on this question—that there can be no treatment of disease by any one who has not made a thorough study of its nature and its diagnosis. If the osteopaths wished to further their cause, let them select able students and put them into the medical faculty of the university, and when trained let them espouse the cause of osteopathy. There was a place for the gifted bonesetter and the osteopath and for other skilled persons. They were welcome; but, to do good, all methods of treatment must be coordinated under general medical guidance. It was the medical profession's duty to protect the public from exploitation by "stunts" and fancies. On the personal side, Sir Herbert Barker by good fortune succeeded to the practice of the famous bonesetter Hutton. The success of manipulative surgery depended on the use of gifted fingers; in suitable cases such treatment was valuable, but when it was employed in unsuitable cases harm resulted. He admitted that the best of the manipulative surgeons were excellent, but the average men about the country were far from that; and when he thought of the "booming" of those manipulative

surgeons by parliament and the press he thought it was laughable to hear their names proclaimed as great pioneers when Great Britain was the proud possessor of the man of genius in manipulative surgery whose reputation was world wide—Sir Robert Jones—whom they never mentioned. Sir Robert Jones had more wisdom in his little finger than the whole lot of them.

Death from Diphtheria Under Christian Science Treatment

The death of a school girl was inquired into by the coroner for West Kent. The child went to a boarding school associated with Christian science. While there last Thursday she developed a sore throat. The head of the school called in a physician, who said he thought it was a little septic, and that she had better be sent home. The mother was a Christian scientist. The child was taken home, and a Christian science treatment adopted. Monday morning the child seemed dangerously ill, and a physician was summoned who formed the opinion that the child was almost dying from diphtheria. He called in the health officer, who confirmed the opinion. Later the child died from diphtheria. A health officer went to the school and found another girl with diphtheria, who was removed to a hospital. He took all steps at once to have the place disinfected and the pupils examined. The mother said she telephoned to a Christian scientist when the child was brought home, and the work was begun the moment she ceased speaking. The coroner: "What is the nature of the treatment?"—"That is a deep question. When we are healers ourselves we can answer that." After a pause the witness added, "Prayer." She said that the name of the first practitioner was Commander Burt. She telephoned to him for immediate prayer. The next day the little girl had improved. Afterward a Mr. Cousins was called in and saw the child, and he told her to telephone if she wanted more help in the night. In the morning she telephoned him again and told him that the child had not had much sleep during the night and she thought it would be nice if she could have sleep during the day. He continued helping her. The coroner: "By prayer, you mean?"—"Yes. Always by prayer." "And prayer alone?" —"Yes. Oh absolutely, prayer and prayer alone. She was much better on the Sunday." The coroner: "If you had known that the child was suffering from diphtheria would you have still persisted in relying on the Christian science treatment?" The mother said she would have had a physician but would have continued with prayer, which no one could gainsay, as in a former case when the child had whooping cough. A juryman asked her whether she knew that had she called a physician the child would probably have been alive today. She replied: "It is a matter of opinion. I have known cases where friends have had specialists who had given them up and Christian scientists' prayers have restored them to life. So you see, one can never tell one way or another." Dr. P. D. Cogswell gave it as his opinion that death was due to syncope from diphtheria. The coroner said it was a very sad case. The mother held strange views from their point of view, but yet deep religious views. It seemed to her that the power of prayer could do more than science by the physician. She honestly believed that now, but she did go further, and say that if she had known the child was suffering from diphtheria she would have called in a physician at once, and also gone on with Christian science treatment. Was she guilty of such neglect as to make her criminally liable? He did not think there was any suggestion of that. There was no doubt she was very fond of the child, but was very misguided. The jury returned a verdict in accordance with the medical evidence. This means that no legal charge of neglect was made against the mother. This has always been the result in these sad cases, the jury evidently holding that, however misguided the parents, they cannot be blamed if they acted in good faith.

Antiquity of the Ape

In a lecture at the Royal College of Surgeons, Sir Arthur Keith reviewed the present state of knowledge relating to the antiquity of man's nearest relatives, the anthropoids. Describing finds in stratified deposits left to the west of Cairo in the estuary of a great vanished river, an ancient predecessor of the Nile, he said that in 1910 was found, in the deposits of older oligocene date, a fossil fragment of the lower jaw of an ape. That jaw gave most definite evidence that a small form of anthropoid ape—now represented by the gibbons, which inhabited the Malayan forests—had come into existence at this remote period. The modern gibbon was a pigmy compared to the gorilla or chimpanzee, but this ancient ancestor of the gibbon was a pigmy compared to its living descendants. The gibbon had sprung from an ancestor little bigger than the marmoset. A discovery made in 1924 by Dr. Fourtan of the Egyptian geological survey showed that in the miocene period the African gibbon had almost the size of its modern representatives. That the gibbon should have appeared so early in geological records did not surprise those who had studied its anatomy. In its structure it showed relationships to monkeys of the New World, to the ordinary monkeys of the Old World, and to the great anthropoids. The gibbon was the central figure in the evolutionary movement which led on to the highest primates. More important from the point of view of those who were in search of a possible human ancestor was the appearance in the miocene deposits of Europe of large anthropoids, which we had every reason to suppose were evolved from a gibbon-like ancestor. There were at least three species of large anthropoids in Europe in later miocene times. Not any of them reached the size of the chimpanzee. Some of the teeth assigned to this extinct type of European ape had a certain resemblance to those of primitive humanity. In the miocene deposits in the southern foothills of the Himalayas, officers of the Indian geological survey had discovered the remains of at least five great anthropoids. Some of these exceeded the chimpanzee in size. Some of them might represent ancestors of the gorilla, chimpanzee and orang. As the geological evidence stood, we might conclude that great anthropoids came into existence somewhere between the end of the oligocene period and the middle of the miocene period. It was not until a great anthropoid stage was reached that human evolution became possible.

Physician's Bequest of His Body

Sir Robert Charles Brown of Preston, Lancashire, consulting medical officer to the Preston Royal Infirmary and other institutions, who died, November 23, 1925, aged 89, left $403,580. To the Cambridge University Research Hospital, Sir Robert left $5,000 and his body, authorizing them to retain such parts of his body as they may consider to be suitable additions to their pathologic museum, and requesting them to place in the museum a glass bottle containing the ashes left by the cremation of his remains, together with a statement of the weight of the ashes and his "average normal weight, which has been 11 stones [70 Kg.]."

Food Poisoning from a Duck Egg

At an inquest on a woman, aged 24, Mr. John Webster, government analyst, stated that he found *Bacillus aertrycke* in enormous quantities in the organs. The woman and four other members of the family had a meal of duck's eggs, after which she was taken ill and died. Dr. D. L. Thomas, health officer for Stepney, stated that *Bacillus aertrycke* was relatively heat-resisting, and boiling for a time did not destroy it. As far as he could make out, there had been no record in the United Kingdom of any cases of food poisoning from eggs. There was no doubt that bacteria could penetrate the shell into the egg.

BUENOS AIRES

(From Our Regular Correspondent)

Feb. 8, 1926.

Control of Biologic Products

Heretofore, only imported serums and vaccines have been standardized. For the last two years, the national health department has been examining both imported and domestic organotherapic products, as well as foreign-made insulin. No control, however, has been exercised over domestic insulin and serums. This deficiency is about to be remedied. The director of the bacteriologic institute has suggested, and the president of the national health department has approved, the creation of a control office charged with the duty of supervising all serums, vaccines and biologic products, and testing their potency and sterility. This measure will be compulsory for both foreign and home products, including those manufactured by the bacteriologic institute itself.

Hospital Enlargement

The reconstruction of the Rawson Hospital is making much progress. There are now 1,200 men working in day and night shifts in order to complete the task within three months. Work will immediately be started on the Ramos Mejía Hospital. When this is completed, there will be 2,600 more beds available in the city hospitals. The cost of each bed is placed at not more than 2,500 pesos ($977). This is quite cheap, according to prices here. The committee in charge of the work authorized an expenditure of 1,100,000 pesos (about $430,000) in addition to the 18,000,000 pesos ($7,000,000), already voted for hospital improvements.

Dental Congress

The Second Latin American Odontological Congress, held recently here, has just issued its resolutions and conclusions. The next congress will be held at Rio de Janeiro, under the auspices of the Latin American Odontological Federation. The emblem suggested by Dr. Carrea was adopted. It was agreed that dentists must graduate as M.D.'s; that the standing of dentists serving in the army and navy must be raised; that dental courses must be unified in the different countries, and that the right of privileged communication must remain undisturbed.

New Journal

The Public Assistance Society, which receives part of its funds from the government, supports several large hospitals. In these, 354,323 patients were treated during the year 1924, and 15,028 operations were performed. The Children's Hospital and the Eye Hospital are already issuing journals of their own. The officers of the society have decided to publish another journal, entitled *Archivos de los Hospitales*, in which the scientific work done at its institutions will be recorded. The editor is Dr. A. Ovenard, and the editorial board includes Drs. P. de Elizalde, F. Etcheverry Boneo, S. Madrid Páez, A. V. Marque, H. Mascheroni, J. Nogués, A. Rodríguez Egaña and F. J. Soriano, of the different hospitals interested.

Tuberculosis Institute

The Agricultural and Veterinary School has offered a large lot to house the proposed Institute for the Study and Treatment of Tuberculosis, a new enterprise approved by the superior university board at the suggestion of Prof. G. Aráoz Alfaro. Its promoter started the collection of funds with a gift of 100,000 pesos (about $39,000), but the money is coming in very slowly.

Insurance Societies Run by Physicians

While large insurance companies as well as friendly and accident insurance societies that have developed in the last few years had showed large surpluses, the physicians employed by them have received scanty salaries. This started a movement, headed by the Argentine Medical Syndicate, for higher medical fees. Then the physicians started in their turn general insurance societies, especially for workers and salaried persons. "La Primera," the first to organize in Buenos Aires, has already met with much success and general approval. Local physicians are now trying to launch a similar society here under the name of "Unión Médica."

Personal

Drs. J. Ferrán and A. Gimeno, Count of Gimeno, are expected in Argentina this years from Spain. Ferrán is known for his cholera vaccine and his views on the mutation of the tubercle bacillus. He has here quite a number both of followers and adversaries. The technical inadequacy of his publications almost prevents full verification of his studies.

GENEVA

(From Our Regular Correspondent)

March 1, 1926.

Effects of Dry Cupping

Recently, Dr. Jules Droin, at the Medical Clinic of the University of Geneva, investigated the effect of dry cupping on the leukocyte count and on the arterial pressure. His results have not yet been published. Of Droin's twenty cases, 65 per cent developed a leukopenia apparently due to the action of cupping; in 10 per cent the leukocytes decreased before the application of the cups; in 10 per cent there was a leukocytosis throughout the application, followed usually by a slight decrease in number. In 15 per cent no conclusions could be drawn, as the oscillations in the number of leukocytes were either insufficient or else offered no apparent relation to the action of the cupping. These results throw a new light on the contradictory results obtained by other observers. Fleury's white hypoglobulia probably is merely the leukopenia of shock, and the hyperphagocytosis of the Italian observers probably corresponds to the leukocytosis present in Droin's cases. Both maximum and minimum blood pressures were taken in sixteen of the twenty cases. In thirteen cases the drop in the maximum pressure averaged 8.43 per cent; in the minimum, 3.7 per cent. Droin found that the diastolic pressures corresponded with those of the maximum pressure, and he believes that a study of the latter is sufficient for the study of hemoclastic shock. Of the sixteen cases, 50 per cent were positive, 25 per cent doubtful and 25 per cent negative. Taking the total of twenty cases, 50 per cent were positive, 20 per cent doubtful and 30 per cent negative. Droin concludes that in the majority of his cases shock comparable to hemoclastic shock followed the application of the cups.

Problems of Heredity

In the course of two public educational days last month, the subject discussed was heredity. A. Ferriere explained the various theories of heredity and demonstrated the reality of acquired characters. He defined the biogenetic law as "a parallelism of childhood and race" and stated that this parallelism was a reality. The speaker pointed out that children's play has its origin in ancestral rites, hence an attempt should be made in directing children's play to graft new activities on ancient instincts.

Alcoholism and heredity was discussed by Dr. Oettli, chief secretary of the Swiss Antialcoholic Society. He pointed out that there were three times more tuberculous and degenerate children in alcoholic families than in others. Although poor housing, insufficient food and other causes enter into the etiology of this condition it was probable that soon we would have proof that the nucleus of reproductive cells would show changes produced by alcohol.

Dr. Tecon, physician to the hospital La Source at Lausanne, discussed tuberculosis and heredity. The idea that tuberculosis is always hereditary is false. It is essential that the children of tuberculous parents should be separated from the source of contagion.

Psychic heredity was dealt with by Dr. O. L. Forel, physician to the Metairie, at Lyons. Dr. Forel defended the rights of defective children, because they do not possess the means for overcoming the difficulties of life. They must be made to understand the necessity of marrying healthy partners in order to prevent mental defects in the offspring.

Edward Claparede, professor of psychology in the University of Geneva, lectured on evidence. Evidence is the recital of a previous event; it usually is false, although the witness does not intend to deceive. Evidence given by children is most often inexact; the child puts forward purely imaginary facts which he believes to be real.

Hypertonia or Essential Hypertension

The monthly lecture of the Medical Society of Geneva was delivered, February 25, by Dr. Emile Thomas of Geneva, his subject being Hypertonia or Essential Hypertension. In certain subjects a more or less constant high pressure was observed although none of the ordinary cardiovascular or renal lesions could be found clinically. Temporary hypertensions, such as Pal has described in lead poisoning and certain other conditions and the hypertonia observed by Ambertin in angina pectoris, are not to be included in the conditions under consideration. Renal and cardiovascular lesions cannot be absolutely eliminated. When the practitioner, after thorough examination, is unable to discover any lesions, his duty is to look elsewhere for the cause of the disturbance. The pathogenesis of these conditions is probably multiple. Dr. Thomas' personal researches, soon to be published, show that, in the rabbit, increased cholesterinemia produces a durable hypertension.

NETHERLANDS

(From Our Regular Correspondent)

Feb. 9, 1926.

Physicians of Railway Companies

The association of railway physicians has just celebrated its fiftieth anniversay. In his presidential address, Dr. Posthuma recalled the history of the association, which was founded to study the organization of first aid to the injured. The association developed until in 1899 a council was formed, which subjects the personnel to examination. The examinations as to fitness have been applied with rigor in order to insure security in passenger traffic. This has been due to the activities of the council. The president disapproves of free choice of physicians in the railway medical service, for the problems are of a special nature and can be solved only by physicians trained for the work. Besides examining applicants for employment, railway physicians watch over the personnel already in the service, to which is due in great measure the security of traffic.

Vaccination Against Pertussis

The Rijks serologisch Instituut of Utrecht recently supplied a number of physicians with a pertussis bacillus vaccine together with a questionnaire. Dr. Pondman has collated the results reported. Sixty-one replies endorsed vaccinotherapy, as against seven that reported more or less doubtful results. The reactions were very slight. Vaccinotherapy must be employed early, and it is more efficacious if the vaccine is polyvalent.

Periodic Medical Examinations

Certain life insurance societies that have relations with foreign organizations are advising their clients to undergo periodic medical examinations. This applies particularly to those who are insured for at least 5,000 florins ($2,000). The societies offer free examination by one of their physicians every three years. It is only a prophylactic measure against insidious disease and is not obligatory. Both patient and life insurance society will be benefited. In order to safeguard the prerogatives of the insured, no information will be given by the physician to the life insurance company.

Outings for Children

The Amsterdam society that provides rural outings for weakly and anemic children has been very active. The society has been able to comply with about 55 per cent of the demands made on it and has afforded about 5,000 children the opportunity of such a vacation. A comparative study indicates that winter outings are just as beneficial as those given in summer.

Dental Aid for Persons of Restricted Means

At Amsterdam an association entitled Amsterdamsch medisch Instituut voor Tandheelkunde has been formed to aid persons of restricted means to secure dental care. In this manner it proposes to combat the practice of dentistry by inexperienced persons, so-called dental mechanics, and to awaken greater interest in mouth hygiene. It is thought that the work will eventually give rise to a group of medical stomatologists. Fears have been expressed by regular graduate dentists that their practices will be interfered with. However, the dental clinic will accept only patients who can pay a moderate but not a private dentist's fee. Then, again, the agitation in favor of mouth hygiene will show to the whole population the necessity of dental care. In this manner, what is lost in one way will be regained in another. The institute will not be administered for profit, but free treatment will not be given. The fees paid must cover the cost of the equipment and the operating and administrative expenses.

Regulations Pertaining to the Sale of Milk and Bread

A new law provides that the following persons be excluded from the manufacture, the handling and the transportation or distribution of bread: persons affected with abscess, suppurating wounds or cutaneous diseases of the head, arms or hands; likewise, all germ carriers (typhoid, paratyphoid, dysentery and cholera). Similar restrictions guard the production and marketing of milk. If anything, they are even more strict.

An Antituberculosis Film

Utilizing the funds raised through subscriptions collected by the Green Cross of Groningen, the central antituberculosis commission has had a film prepared to enlighten the people in regard to tuberculosis. The film does not inspire fear but awakens rather the hope of recovery owing to the treatment made available through the antituberculosis organizations. The scene opens with a shoemaker working in his shop. He begins to observe symptoms of tuberculosis but refuses to pay a visit to the antituberculosis dispensary. The spectator is brought face to face with the dangers of crowded dwellings and sees that infection, once in the home, is bound to contaminate the children. One day the shoemaker happens to enter the antituberculosis museum, where a physician explains to him the pathology and the dangers of tuberculosis. He comes out an enlightened man. Shortly his improvement as the result of the good care he receives is noticeable. There pass successively across the screen views of attractive sanatoriums and beautiful parks for convalescents. Finally, after leaving the sanatorium, almost fully restored to health, the shoemaker is seen working at his trade in the open air, in a postsanatorial therapeutic center. In the meantime, a nurse has taken care of his children, having taken them to a maritime colony in the country. They, also, return much improved in health by their outing.

Life Expectancy of Physicians

In an article in the *Nederlandsch Tijdschrift voor Geneeskunde*, Dr. De Wilde gives some of the results of his researches on the life expectancy of physicians. Greene in his book "Examination for Life Insurance" makes the statement: "Judged strictly by mortality tables, the doctor would be a poor risk." De Wilde's researches cover 2,500 physicians who have died since 1861. The average age at which the group began to practice was found to be 25. The average age at which death occurred was 59.6, whereas the average age of death of the male population during the same period was 64.8. The percentage of physicians dying in the various decades is shown in the subjoined table.

Percentage of Physicians Dying at Various Ages

Age	Percentage
From 25 to 35	8.06
From 35 to 45	9.5
From 45 to 55	14.88
From 55 to 65	20.38
From 65 to 75	24.28
From 75 to 85	16.78

BERLIN

(From Our Regular Correspondent)

Feb. 20, 1926.

Tuberculosis Mortality Among Miners of the Ruhr Region

The tuberculosis mortality of the miners of the Ruhr region before the war was lower than in almost all other dust-producing industrial occupations, and lower than the average mortality for Germany as a whole. This is partly explained by the fact that in the mines more often than in other industries, workmen whose physical condition was below par were excluded. Another circumstance that contributes to the low mortality among miners is the earlier age at which they may be put on the pension list for invalidism or permanent total disability. Dr. Grünewald of Dortmund has pointed out that among underground workmen droplet infection can scarcely occur; furthermore, sputum expectorated on coal, owing to the damp coal dust, is not likely to be carried in floating dust particles. Many believe another factor is that, owing to the high wages that miners received before the war when compared with the lower price that they paid for food, they were able to supply themselves with especially good food. Soon after the beginning of the war, the food supply became deficient and prophylactic measures came to be neglected. These circumstances exerted an unfavorable influence on the tuberculosis mortality of the whole population, including the miners. The adjoining table shows the mortality from pulmonary tuberculosis in the mining industries of the Ruhr region in Prussia and in Germany in the period from 1910 to 1924.

Mortality per 10,000 from Pulmonary Tuberculosis Among:

	Members of the Ruhr Mining Association	Inhabitants of Prussia	Inhabitants of Germany
1910	7.86	13.4	13.0
1911	7.39	13.4	13.6
1912	6.40	12.9	13.1
1913	6.16	11.9	12.1
1914	7.29	12.2	12.2
1915	9.59	12.8	12.8
1916	11.45	13.9	13.9
1917	16.82	18.4	18.0
1918	21.68	20.9	20.2
1919	17.34	18.8	18.2
1920	10.22	13.3	13.0
1921	9.19	11.8	11.5
1922	11.23	12.4	12.0
1923	14.99	....	....
1924	9.26	....	....

In the main, the tuberculosis mortality among the Ruhr miners before, during and since the war has been subject to the same fluctuations as among the remaining population. With the exception of the years 1922 and 1923, which correspond with the period of depreciation of the currency and the passive resistance in the Ruhr during which wages and the cost of living did not stand in the proper relation, it will be seen that the mortality rate of the Ruhr miners is approaching the prewar figure. In connection with the high mortality rate during the war years, it must be recalled that the healthiest of the miners had been drafted into the army. Their places had been taken, for the most part, by old or youthful persons, and, in addition, the medical examinations for admission to the mines were not so strictly carried out as before the war. The fact that the rate in 1924 is not as low as that of the prewar period is partly because the weaker workmen selected during the war years as a rule remained in the mines. Also, a shortening of the shifts has necessitated a larger number of workmen, and with the increased demand for men the vigilance of the examiners may have relaxed somewhat. Other factors are the large number of refugees from the war zones who have been given employment and the bad housing situation. In spite of these adverse conditions, the percentage of deaths from pulmonary tuberculosis among the miners of the Ruhr region is considerably below the average for the country as a whole. No doubt the general improvement in wages and in living conditions exerted a favorable influence on the mortality rate for 1924.

Death of Prof. J. Israel

Prof. J. Israel, the well known surgeon, died, February 20, at the age of 78. Up to a few weeks before his death he performed difficult operations. The apparent cause of death was a latent gastric carcinoma. In spite of his advanced age, he enjoyed unusual health and vigor up to the beginning of his illness. His renewed activity in recent years was, to be sure, forced upon him. With the completion of his seventieth year he had given up the directorship of the surgical department of the Jewish Hospital, and it was doubtless his intention soon to retire from private practice. But the financial crisis brought on by inflation of the currency left him, like many others, without adequate means of support, so that he was compelled to continue his professional work. He was a remarkable diagnostician and surgical technician. Israel was indebted for diagnostic ability to his teachers Traube and Langenbeck. He was Langenbeck's assistant when the latter was in charge of the surgical department of the Jewish Hospital. It was owing to Langenbeck's recommendation that Israel became his successor. Although Israel never formally assumed an academic career, he nevertheless became the teacher of many physicians in this and foreign countries, which circumstance led to his being frequently chosen by foreign physicians to serve as consultant. His fame as an investigator was based on two main achievements: his discovery of the rôle of the Actinomyces parasitic fungus in human pathology, which was first set forth in a monograph appearing in 1885, and his epoch-making articles on kidney surgery. Especially important was his demonstration that tuberculosis of the kidney in many—possibly most—cases is primary and is not due to the upward trend of a bladder infection, as was formerly assumed. This demonstration opened up the possibility of eliminating kidney tuberculosis by extirpation of the diseased organ. His monograph, published in 1894, on "Experiences with Kidney Surgery" occasioned something of a sensation. In 1901, he published an enlarged edition entitled "Clinical Surgery of Kidney Diseases." Numerous further scientific treatises included all fields of surgery. His plastic operations were especially significant. In Berlin society, and especially in medical circles, he held a high position. He was vice chairman of the Berliner Medizinische Gesellschaft, and an honorary member of the Deutsche Gesellschaft für Urologie and of several foreign surgical societies.

Marriages

ARTHUR F. SMITH to Miss Isabelle Amundson, both of Milford, Iowa, January 6.

DENNIS H. KELLY, Clinton, Iowa, to Miss Ailen Carney of Grinnell, January 4.

ISAAC J. TOWNES, Madisonville, Ky., to Miss Laura E. Hoffman of Mayfield, March 11.

Deaths

Harry Merriman Steele, New Haven, Conn.; Johns Hopkins University Medical Department, Baltimore, 1902; past president of the New Haven County Medical Society; member of the Connecticut State Medical Society, and the New England Pediatric Society; assistant in pediatrics, University and Bellevue Hospital Medical College, 1902-1904; clinical professor of pediatrics, Yale University School of Medicine, and for several years instructor in pediatrics and assistant in pathology; on the staffs of the Charlotte Hungerford Hospital, Torrington, and St. Raphael's Hospital, New Haven; aged 54; died, March 18, of lobar pneumonia.

Henry Fauntleroy Harris, Atlanta, Ga.; Atlanta Medical College, 1889; Jefferson Medical College of Philadelphia, 1890; member of the Medical Association of Georgia, and the American Association of Pathologists and Bacteriologists; professor of chemistry, Southern Medical College, 1892-1896, associate professor of pathology, Jefferson Medical College, 1896-1901, and professor of pathology and bacteriology, Atlanta College of Physicians and Surgeons, 1901-1910; formerly secretary of the Georgia State Board of Health; aged 59; died, March 18, at the Jefferson Hospital, Philadelphia, of paralysis.

George Washington McDowell, New York; New York Homeopathic Medical College, 1886; emeritus professor of ophthalmology, otology and rhinology at his alma mater; member of the New York Academy of Pathological Science; on the staffs of the Flower Hospital, New York Ophthalmic and St. Gregory's hospitals, Laura Franklin Free Hospital for Children, Protestant Half-Orphan Asylum and the Methodist Episcopal Church Home; aged 65; died, March 16, at New Rochelle, N. Y.

Howard A. Hellyer, Penns Park, Pa.; University of Pennsylvania School of Medicine, Philadelphia, 1868; member of the Medical Society of the State of Pennsylvania; past president of the Bucks County Medical Society; secretary of the county school board since 1885; aged 80; died, March 12, at the Samaritan Hospital, Philadelphia, following a long illness.

Thomas J. W. Burgess, Montreal, Que., Canada; University of Toronto (Ont.) Faculty of Medicine, 1870; formerly professor of mental diseases, McGill University Faculty of Medicine; at one time superintendent of the Protestant Hospital for the Insane; member of the American Psychiatric Association; aged 76; died, January 18.

George Minot Garland ⊕ Wellesley Farms, Mass.; Medical School of Harvard University, Boston, 1874; assistant in physiology, 1877-1881, and assistant and instructor in clinical medicine, 1881-1892, at his alma mater; formerly on the staff of the Massachusetts General Hospital, Boston; aged 77; died, March 2.

Harry J. Hornbogen ⊕ Marquette, Mich.; College of Physicians and Surgeons, Chicago, 1894; secretary of the Marquette County Medical Society; member of the board of education; formerly on the staff of St. Luke's Hospital; aged 54; died, March 17, at Hollywood, Calif., of heart disease.

Henry Morton Hall, Cedartown, Ga.; University of Georgia Medical Department, Augusta, 1899; member of the Medical Association of Georgia; part owner of the Hall-Chaudron Hospital; formerly mayor of Cedartown; served during the World War; aged 56; died, March 14, of myocarditis.

Thomas John Sullivan, Jr. ⊕ Chicago; University of Illinois College of Medicine, Chicago, 1915; member of the Chicago Orthopedic Club; on the staff of the Mercy Hospital; served during the World War; aged 36; died, March 23, of chronic nephritis.

⊕ Indicates "Fellow" of the American Medical Association.

Joseph Alphonse Kene ⊕ Brooklyn; Medical Department of the University of the City of New York, 1878; chief medical examiner of the Municipal Civil Service Commission since 1898; member of the Brooklyn Neurological Society; aged 69; died, March 11, of heart disease.

Harry Lavelle Murphy, Pittsburgh; Georgetown University School of Medicine, Washington, D. C., 1912; member of the Medical Society of the State of Pennsylvania; served during the World War; aged 38; died, February 10, at the Southside Hospital, of pneumonia.

Charles A. McCollum, Pasadena, Calif.; Rush Medical College, Chicago, 1868; formerly connected with the Medical Department Hamline University, Minneapolis; at one time on the staff of St. Mary's Hospital, Minneapolis; aged 78; died, January 22.

Virgil Maro Dow Marcy, Jr. ⊕ Cape May, N. J.; University of Pennsylvania School of Medicine, Philadelphia, 1900; formerly president of the board of health and board of education; served during the World War; aged 47; died, March 8.

J. Brown Wallace ⊕ Tampa, Fla.; University of Maryland School of Medicine, Baltimore, 1897; served in the M. C., U. S. Army, during the World War; on the staff of the Bayside Hospital; aged 52; died, Dec. 31, 1925, of pneumonia.

Frederick L. Wakeham, New York; Medical Department of Columbia College, New York, 1892; formerly on the staffs of the Mount Sinai and Sydenham hospitals; aged 55; died, March 4, at New Rochelle, following a long illness.

Wyclif Kerr Curtis, Midland, Texas; Jefferson Medical College of Philadelphia, 1878; member of the State Medical Association of Texas; county health officer; aged 73; died, February 27, at a hospital in El Paso, of pneumonia.

William J. Burd ⊕ Belvidere, N. J.; University of Pennsylvania School of Medicine, Philadelphia, 1889; formerly president and secretary of the Warren County Medical Society; aged 60; died, March 5, of heart disease.

Charles Hervey Bailey, New York; Medical School of Harvard University, Boston, 1910; member of the Medical Society of the State of New York, and the New York Pathological Society; aged 44; died, March 1.

Christian R. Scheller ⊕ Hagerstown, Md.; Jefferson Medical College of Philadelphia, 1883; formerly president of the board of health; for several years county and city health officer; aged 64; died, March 5.

Thomas Henry Welsch, Hannibal, Mo.; Barnes Medical College, St. Louis, 1904; aged 43; was killed, March 1, near Wentzville when the automobile in which he was driving went over an embankment.

John Percival Hewson, Orange, Texas; University of Pennsylvania School of Medicine, Philadelphia, 1913; aged 38; died, February 27, at St. Joseph's Hospital, Denver, of pulmonary tuberculosis.

Alva Rufus Hull, Nampa, Idaho; Northwestern University Medical School, Chicago, 1898; served during the World War; aged 53; died, March 10, of a gunshot wound, presumably self-inflicted.

John Warren Holt, Eminence, Ky.; Louisville Medical College, 1897; member of the Kentucky State Medical Association; aged 54; was found dead in bed, March 2, of chloroform poisoning.

George Wicks Spencer ⊕ Philadelphia; Jefferson Medical College of Philadelphia, 1892; formerly associate professor of surgery at his alma mater; aged 55; died, March 7, of uremia.

Dewees A. W. Huebner, Fern Glen, Pa.; Jefferson Medical College of Philadelphia, 1886; member of the Medical Society of the State of Pennsylvania; aged 62; died, Dec. 1, 1925.

Joseph Merrell Hamblin, San Francisco; California Eclectic Medical College, Los Angeles, 1918; aged 32; died, January 5, at the San Francisco Hospital, of chronic bronchitis.

Joseph L. Isenberg, Williamsburg, Pa.; Jefferson Medical College of Philadelphia, 1893; member of the Medical Society of the State of Pennsylvania; aged 57; died, Nov. 17, 1925.

James Crowe Burdett, Evelyn, La.; Memphis Hospital Medical College, 1905; served during the World War; aged 49; died, February 16, at the Mansfield (La.) Sanitarium.

Charles Augustus Adams, Des Moines; Meharry Medical College, Nashville, Tenn., 1906; member of the Iowa State Medical Society; aged 48; died, January 26.

William L. Newton, Camden, Ark.; Memphis Hospital Medical College, 1899; formerly postmaster; aged 50; died, February 26, of heart disease.

Theophilus J. Langlois, Wyandotte, Mich.; Detroit Medical College, 1871; health officer of Wyandotte for forty years; aged 86; died, March 3, of hypostatic pneumonia and senility.

Henry Croskey, Kansas City, Mo.; Hahnemann Medical College of Philadelphia, 1878; aged 77; died, February 19, at St. Luke's Hospital, of cerebral hemorrhage.

Amos Bryan Krebs ✠ Bolivar, Pa.; Cincinnati College of Medicine and Surgery, 1886; aged 62; died, February 10, at the Memorial Hospital, Johnstown, of diabetes.

Earl Percy Cushman, Claremont, N. H.; University of Vermont College of Medicine, Burlington, 1900; served during the World War; aged 52; died, February 23.

Henry W. Kriege, St. Louis; St. Louis Medical College, 1885; Homeopathic Medical College of Missouri, St. Louis, 1888; aged 67; died, February 27, of anemia.

William Stump, Emmorton, Md.; University of Pennsylvania School of Medicine, Philadelphia, 1895; aged 57; died, February 3, of angina pectoris.

George Stephen Mikkelsen ✠ Kewanee, Ill.; Chicago College of Medicine and Surgery, 1907; aged 43; died, March 9, at a hospital in Chicago.

Robert Stanley Minnes, Ottawa, Ont., Canada; Queen's University Faculty of Medicine, Kingston, 1893; aged 55; died, Dec. 27, 1925.

John Calvin Rush, Eatontown, N. J.; Hahnemann Medical College and Hospital of Philadelphia, 1896; aged 71; died suddenly, March 3.

Bryan DeForest Sheedy, New York; Medical Department of the University of the City of New York, 1885; aged 61; died, March 5.

Jonathan McCully, Cedar Springs, Ont., Canada; Victoria University Medical Department, Toronto, 1866; aged 91; died, Dec. 22, 1925.

Byron A. Smith, Erie, Pa. (licensed, Pennsylvania, 1881); formerly a druggist; aged 83; died, February 25, following a long illness.

Thomas Walker, St. John, N. B., Canada; L.R.C.S., Edinburgh, 1863; University of Edinburgh, 1863; aged 85; died, Dec. 25, 1925.

E. L. Crumpler, Merry Hill, N. C.; Medical College of Virginia, Richmond, 1893; died, February 20, of influenza and asthma.

John L. Cassilly, St. Louis; Missouri Medical College, St. Louis, 1867; Civil War veteran; aged 81; died, February 21, of senility.

Robert Gerstell, Keyser, W. Va.; University of Maryland School of Medicine, Baltimore, 1873; aged 76; died in February.

Neville James Lindsay, Calgary, Alta., Canada; Trinity Medical College, Toronto, Ont., 1874; aged 80; died, Dec. 17, 1925.

Charles Sherman Jewett ✠ Buffalo; Medical Department of Columbia College, New York, 1890; aged 60; died, Nov. 5, 1925.

James Neeper Richards, Fallsington, Pa.; Bellevue Hospital Medical College, New York, 1873; aged 76; died, January 19.

John Benson, Colfax, Wash. (licensed, Washington, 1885); for many years county health officer; aged 76; died, January 27.

John Charles C. Grasett, Simcoe, Ont., Canada; Trinity Medical College, Toronto, 1887; aged 63; died, Dec. 14, 1925.

George A. Yates, Cleveland; University of Nebraska College of Medicine, Omaha, 1889; aged 65; died in February.

Christopher C. D'Armond, Knoxville, Tenn.; University of Louisville School of Medicine, 1884; aged 78; died recently.

Hiram Wigle, Wiarton, Ont., Canada; McGill University Faculty of Medicine, Montreal, Que., 1875; died, January 4.

Aaron Rivkees ✠ Philadelphia; Medico-Chirurgical College of Philadelphia, 1913; aged 47; died, February 10.

Caleb Blyholder, Pittsburgh; Jefferson Medical College of Philadelphia, 1873; aged 83; died, February 24.

James McComb, Lebanon, Mo.; Jefferson Medical College of Philadelphia, 1865; aged 93; died, March 6.

Frederick Ernest Schmidt, Muscatine, Iowa; Keokuk Medical College, 1891; aged 56; died, January 8.

Edward Reese Cook, Vicksburg, Miss.; St. Louis Medical College, 1877; aged 69; died, February 10.

George O. Baxter, St. John, N. B., Canada; Detroit Medical College, 1885; died in December, 1925.

The Propaganda for Reform

IN THIS DEPARTMENT APPEAR REPORTS OF THE JOURNAL'S BUREAU OF INVESTIGATION, OF THE COUNCIL ON PHARMACY AND CHEMISTRY AND OF THE ASSOCIATION LABORATORY, TOGETHER WITH OTHER GENERAL MATERIAL OF AN INFORMATIVE NATURE

TUBERCULENE

A Fraudulent Consumption Cure Debarred from the Mails

For over a year a rather self-evident fraud has been exploited from Danville, Ill., under the trade name Tuberculene Manufacturing Co., by one Mrs. G. J. Murrman, who sold "Tuberculene," a "lung restorer." The price was $3 for fifteen days' treatment. The preparation was put on the market so crudely that it not only obviously violated the federal Food and Drugs Act but its sale constituted fraudulent use of the United States mails. March 8, 1926, Postmaster General Harry S. New, on the recommendation of Judge Horace J. Donnelly, Solicitor of the Post Office Department, issued a fraud order against the Tuberculene Manufacturing Co. and its officers and agents at Danville, Ill.

Judge Donnelly's memorandum to the Postmaster General describes the case against this swindle. December 15, 1925, the Tuberculene Manufacturing Co. was called on to show cause why a fraud order should not be issued against it. December 21, J. J. Carter, an attorney of Danville, Ill., filed a brief on behalf of Mrs. G. J. Murrman.

The Solicitor's memorandum declares that Mrs. Murrman is an uneducated, middle-aged woman, who was exploiting Tuberculene as a cure for tuberculosis and other conditions. Her method was to insert in newspapers circulating through the mails in the vicinity of Danville an advertisement reading as follows:

TUBERCULENE
DESTROYS ALL T. B. GERMS.
HEALS UP THE LUNGS.
WHY PUT UP WITH T. B., ASTHMA, FLU,
BRONCHITIS, COUGHS OR COLDS OF ANY KIND?
Tuberculene Gets Rid of These Ailments
Lung Restorer and Germ Destroyer.
Guaranteed If Taken According to Directions.

No individual with intelligence enough to publish a newspaper could, in this age and day, believe that this advertisement is bona fide. One of the main reasons that the mail-order medical quack plies his trade is that there are newspapers or magazines that will accept his advertising and become the intermediary for the contact between the swindler and the swindled.

The postal authorities, in investigating Tuberculene, had one of the inspectors enter into test correspondence with the Tuberculene Manufacturing Co. for the purpose of obtaining information respecting the representations under which Tuberculene was sold through the mails. The Tuberculene concern in replying to the request for information regarding the product wrote that Tuberculene would do all that it claimed, and stated that there were a number of tuberculous patients who had been cured by Tuberculene and that some of them were living in Danville. Another letter was written to the company, asking that the medicine be sent provided it would effect a cure of tuberculosis. A bottle of the stuff was thereupon forwarded, parcel post, C. O. D., $3.

Tuberculene was a mixture of creosote, rock candy syrup, glycerin, syrup of wild cherry and coloring matter. The government thereupon called on Dr. Lyman F. Kebler, who is in charge of special collaborative investigations, Bureau of Chemistry, U. S. Department of Agriculture, for an opinion regarding this product and the claims made for it. Dr. Kebler, who was formerly connected with a sanatorium for the treatment of tuberculosis, explained, of course, that no such mixture as this had any curative value in consumption. He pointed out, too, that the use of such a nostrum by the tuberculous would, in all probability, only serve to cause the unfortunate victim to lose precious time in his fight for life. He explained that creosote preparations had long been used in the treatment of certain symptoms in cases of pulmonary tuberculosis, but that it has definitely been established that they do not destroy the tubercle bacilli. He declared that the claim made by Mrs. Murrman that Tuberculene would "destroy all T. B. germs" was false and fraudulent.

The Solicitor's memorandum shows that Mrs. Murrman has no knowledge of medicine, but on the contrary "is shown by her conversation and letters to be very ignorant." Although the active promotion and the sale of Tuberculene was not begun until January, 1925, Mrs. Murrman advertised "18 yrs. Experience." In view of the evidence Judge Donnelly declared the business a scheme for obtaining money through the mails by means of false and fraudulent pretenses, representations and promises, and recommended the issuance of a fraud order.

Correspondence

DIABETES MELLITUS AND CHRONIC ARTHRITIS

To the Editor:—The article on this subject (THE JOURNAL, February 20, p. 535) suggests a note on my personal experience with diabetes and arthritis.

In July, 1923, after twenty years of careful, conventional antidiabetic dieting, I had a sudden acute attack of sciatica in the right hip and leg. My physician immediately began the use of insulin with a weighed diet. There was no other treatment. After ten weeks of helplessness in bed followed by four months spent in getting the muscles back to normal, complete recovery was secured, except for a slight numbness in the right big toe. The net stripped weight, which had dropped during five years to 149 pounds (68 Kg.), began to increase. Within a year it went to its former 187 (85 Kg.), the right figure for my height of 6 feet 1 inch (185 cm.). It stays at 187. Four years before the attack of sciatica, both tonsils were removed because they were in poor condition. There had been no rheumatism or arthritis at any age before the sciatica. Insulin is continued at 50 units twice daily before each of the two meals, 100 units every twenty-four hours. The diet is whatever I like, provided it is kept within the limits of the insulin. The food is not weighed, but the amounts are those indicated by experience, checked by daily tests with Benedict solution. Generous quantities of milk, butter, cheese and celery, and bulky, raw foods are eaten.

On four occasions, following neglect of control by the Benedict tests and consequent overload of blood sugar, a troublesome attack of arthritis has occurred. Each attack was prevented from becoming severe by cutting the diet down to Benedict sugar free condition. But as the arthritis remained rather constant, the experiment was tried of taking 20 units of insulin at 9 p. m. in order to test the effect of reduced blood sugar during the hours of sleep. As a precaution, a quantity of lump sugar was placed beside the bed so that if disagreeable symptoms arose from low blood sugar the condition could be promptly corrected. The insulin was injected two hours before the time of falling asleep, as a further safeguard. The result was the one hoped for. The arthritis ceased and cleared away completely as the result of taking the insulin on two successive evenings. After several months there was another attack at another location, when the blood sugar had been allowed to become excessive through neglect of control by Benedict tests. The right leg and hip were never attacked. The left hand, jaws, and twice the shoulders were the locations. Each was cleared in two days.

I am a retired chemical engineer, and not a physician; by good fortune, thirty-five years ago, I made the professional acquaintance of the late Dr. Henry L. Elsner of Syracuse, who taught me the habit of birthday long life health examinations. They disclosed the diabetic tendency and established its control by careful diet. The use of insulin since 1923 has brought normal health, as indicated by restored weight and energy of body and mind.

H. W. JORDAN, Syracuse, N. Y.

Queries and Minor Notes

ANONYMOUS COMMUNICATIONS and queries on postal cards will not be noticed. Every letter must contain the writer's name and address, but these will be omitted, on request.

SALIVATION AFTER MERCURY

To the Editor:—Please discuss the cause of salivation after the administration of calomel or other forms of mercury. I have not had trouble with salivation myself in treating patients with calomel, but the public frequently charges that a physician gave calomel and did not tell the patient what he was giving and left no caution about giving acids. Then after the patient partook of lemonade or vinegar or acid fruits or pickles, salivation resulted. In a case of typhoid, salivation was said to be the cause of death. Do sour things really have anything to do with it? Isn't it the change of the mild mercurous chloride into the corrosive mercuric or other form resulting from the addition of chlorine taken from another group—HCl or NaCl? Kindly discuss the cause, treatment and prevention of salivation. In the treatment of syphilis the physiologic effect of mercury or beginning salivation is often attained. Withdrawal of the mercury and elimination with the use of atropine and potassium chlorate in the mouth corrects it. Therefore, how could such disastrous results as alleged occur from calomel in a case of typhoid or any other condition? Kindly omit name.

M.D., Kansas.

ANSWER.—The mechanism of the production of mercurial stomatitis is not perfectly understood. There are chiefly two theories that deserve recognition in accounting for it. According to one, it is due to the irritation produced by the mercury eliminated in the saliva. Variability in degree of elimination by this channel, which has been demonstrated to occur, would account for variation in susceptibility. There are, however, a number of peculiarities of this condition that cannot well be accounted for in this manner. According to the other theory, it is the hydrogen sulphide produced by bacterial decomposition of putrefying organic matter, that reacts with the mercury ion circulating in the capillaries, causing its precipitation and accumulation at such areas in harmful quantities. This theory would explain the reason for the special tendency of inflammation and even necrosis to localize itself at the two ends of the alimentary tract, the mouth and the colon; also why a clean mouth is much less liable to mercurial stomatitis than one that harbors putrefying material. As such matter accumulates between the teeth and in the cavities of decaying teeth, it explains the marked immunity of the edentulous, including infants, to this disturbance. That the theory incriminating hydrogen sulphide with this occurrence does not offer an altogether satisfactory explanation is shown by the fact that stomatitis may not occur even though the mouth is foul and that it may occur, though rarely, in a patient with a clean mouth. That the presence of certain bacteria plays an important rôle in this condition cannot be doubted.

A foul condition of the mouth, together possibly with poor elimination by other channels and a general lowering of cell nutrition, might account for more disastrous results from calomel in a typhoid fever patient than would occur ordinarily.

Why acidulous fluids, such as lemonade or vinegar, should be charged with a tendency to produce ptyalism is not easy to comprehend, and that this is a fact may well be doubted. The true acid (hydrogen ion concentration) of these is very

low; and, as is well known, the acidity even of the gastric juice, which is much greater, does not activate calomel, as this does not become active until it reaches the intestine.

The prevention of salivation, as will be readily understood from what has just been said, depends not only on limiting the dose of the mercurial to the capacity of the organism, but also on keeping the mouth in a perfectly hygienic condition, including whatever dental care may be required. The use of a mouth wash and soft tooth brush after each meal should be insisted on. In addition, smoking is inadvisable.

In the treatment of the condition, besides stopping immediately the introduction of the mercurial, steps should be taken to favor its elimination by other channels. Sodium thiosulphate might be given for its alleged antidotal action.

As local treatment, the use of potassium chlorate in saturated solution as a mouth wash is too well known to require detailed discussion. If, however, there is necrotic material in the mouth, hydrogen peroxide, 1 part, diluted with warm water, 2 or 3 parts, is of advantage. Marked fetor would require the frequent use of a rose or port wine color solution of potassium permanganate. When the necrotic material has been shed and ulcers are left, full healing may be expedited by the occasional application of silver nitrate. The pain on eating may be considerably relieved by preliminary use of a local anesthetic, such as ethyl aminobenzoate (benzocaine).

THE ZOALITE LAMP

To the Editor:—I am writing to seek information relative to a therapeutic lamp called the Zoalite, which I think is on the general commercial market. What I wish to know is whether you can tell us the percentage of infra-red given off from this lamp and what other rays are given off from it?

A. F. TYLER, M.D., Omaha.

ANSWER.—The Zoalite is a device for producing radiant heat for therapeutic purposes. The heat is produced by a "resistor," which is heated by an electric current. This "resistor" is similar in composition to the "resistor" used in some heaters sold for domestic purposes.

The radiant energy emitted by this heating unit is not unlike the radiant energy produced by any incandescent body, such for example as a bar of hot iron or the filament of a tungsten lamp.

The therapeutic value of the Zoalite is precisely that of other sources of radiant heat.

INFANT FEEDING

To the Editor:—This letter is both an inquiry and, perchance, a warning. Recently our local clinical club in a city of 20,000 held a clinic at our local hospital. One of the leading pediatricians of our country spoke. This particular clinic was a great success. But I am wondering about some of the statements made: "Condensed milk or dried milk is the best infant food aside from mother's milk." "This case [swollen abdomen, marasmus, malnutrition] is intestinal indigestion, and tuberculous peritonitis can be ruled out because of the age" (2 years). Are these statements universally accepted, along with the one that "starch is well handled by infants after the fourth month"? We, in the country, work under a great handicap. We have no great hospitals at our front door; but we do visit the larger clinics with more frequency, I believe, than is the custom among the rank and file in the large city. We do not want skim milk when we invite a leader to come to us. We are able to digest red meat, and that is what we desire. This letter sounds harsh, as I reread it. That is not my intent. I do wish, however, that the men who come out to us could remember that we, like themselves, are physicians. Learning is available to all men. Please use initials only.

R. E. S., Vermont.

ANSWER.—Cow's milk dilutions with carbohydrates added are the food of choice for infant feeding when breast milk is not available. There are few infants who will not thrive on such fresh, clean cow's milk mixtures throughout most of the year even though we have a good quality of milk. The exceptional baby may not be able to take fresh cow's milk, but these are few. If good milk is not available, the dried milks should be given consideration. The same may be said when the child is traveling or is taken for short visits away from its regular diet. Dextri-Maltose, Mellin's Food, and Horlick's Malt Food have practically the same ingredients except for a difference in percentages.

Tuberculous peritonitis is more common after the second year than before; acute miliary tuberculosis involving the peritoneum is more frequent under 2 years of age.

Well cooked starch may be added to the milk mixtures after the sixth week of life.

All of the points covered in this answer, with the exception of that on tuberculous peritonitis, are contained in "Infant Feeding," published by the American Medical Association.

ACCESSORY PANCREAS

To the Editor:—I wish to know whether it will be possible to find out if the case of de Jong of accessory pancreas at the pylorus occurred in an infant or adult, and if the stenosis was congenital. The case is referred to in an abstract in THE JOURNAL, July 10, 1920, page 141.

KELLY HALE, M.D., Wilmington, Ohio.

ANSWER.—De Jong's case was published in German in *Virchows Archiv* **223**:220, 1917, and in the *Nederlandsch Tijdschrift voor Geneeskunde* **2**:2372, 1915. The patient was a woman, aged 38, who for eight years had been having symptoms from the stomach, especially spasms of severe pain, relieved by eating; there was no vomiting. Laparotomy on the diagnosis of duodenal ulcer revealed a small tumor, the size of a pea, on the lesser curvature, close to the pylorus, which it partially obstructed. The tumor was excised, completely curing the patient. The tumor proved to be entirely normal pancreas tissue, with normal Langerhans' islands; merely the abnormal location had entailed the severe symptoms. The article is headed "Benign Tumors at the Pylorus," and describes three other cases of hypertrophy with more or less stenosis of the pylorus, caused by simple proliferation of apparently normal glands. There were no signs of inflammation in any of the cases and nothing to suggest malignant disease. The article by Nieuwenhuijse, in which de Jong was mentioned, is an exhaustive study of aberrant pancreas tissue and why it is so often associated with diverticulum formation in the lower portion of the small intestine (seven authors are cited who have published such) but so rarely in the duodenum and never in the stomach. Scagliosi found pancreas tissue in the wall of a duodenal ulcer in two cases. These tumors are always small and benign, according to six authors cited. Saltykow asserts that all carcinoid bowel tumors are due to aberrant pancreas tissue, but Nieuwenhuijse's study of five cases of accessory pancreas (one found at necropsy of a woman, aged 75) failed to reveal any suggestion of malignant disease, and Scagliosi is the only writer who has mentioned such.

NONSPECIFIC PROTEIN IN PSORIASIS

To the Editor:—What are the indications for milk (protein) hypodermic injections? What is the technic for giving milk injections (hypodermic)? Are they indicated or have they been used in the treatment of psoriasis? If so, with what success?

F. E. PERKINS, M.D., Watertown, N. Y.

ANSWER.—Injections of milk protein should be intramuscular, not hypodermic. They have been used in conditions in which it is desired to stimulate resistance to disease by causing a mild reaction to nonspecific proteins. Injections of milk protein have been used in a host of conditions, but this use is not supported by controlled clinical evidence from reputable observers. The technic is that of intramuscular injection. The patient should be face downward on the table with the arms hanging over the sides of the table to aid relaxation. The toes should be directed inward, pigeon toed, to relax the gluteal muscles. One hand of the operator draws down the muscles toward the patient's feet and the other plunges the needle into the buttock at an angle of 20 degrees from vertical (toward the patient's feet) and slightly inward (toward the median line). The point of entrance should be near the lower, inner angle of the outer upper quadrant of the buttock. The needle should be buried to the depth of from 1 to 2 inches in adults, depending on the size of the buttock. The downward pressure on the buttock is then relaxed. If no blood flows from the needle, the syringe, previously filled, is attached, and back traction made for several seconds, at least ten. If no blood appears, the injection is made slowly. One should press with a sterile sponge at the point of entrance of the needle, and withdraw the needle, then massage gently for several minutes. The patient should remain in position for a few minutes after the injection is finished.

USE OF ANTIGONOCOCCAL VACCINE

To the Editor:—Is the injection of bacterins (Neisser) now used extensively? Please use initials.

D. E. S., Alaska.

ANSWER.—It is probable that gonococcus vaccine in some form or other is still used by physicians in the treatment of gonorrhea and its complications. There is no question, however, but that this practice is far less extensive than formerly. The use of gonococcus vaccine for curative treatment appears to be sharing in the decline in popular favor of bacterial vaccines in general. Gonococcus Serum and Gonococcus Vaccine were omitted from New and Nonofficial Remedies

because the Council on Pharmacy and Chemistry concluded that there was no evidence to show that these preparations had therapeutic value (Colon Bacillus Vaccine, Gonococcus Serum and Gonococcus Vaccine Omitted from N. N. R., The Journal, Jan. 17, 1925, p. 220).

PRESCRIPTION FOR ALOPECIA

To the Editor:—In The Journal, January 23, in the article on "Technic of Medication," was the formula for a lotion prescribed for alopecia. I have asked at a local druggist's to have this made up, and the question arose as to whether the amount of tincture of cantharides was correctly written or not. Equal parts of tincture of cantharides, tincture of capsicum and compound spirit of myrcia was the prescription given. Will you kindly advise me? Pauline L. Packard, Ashland, N. H.

Answer.—The quantities in the "hair tonic," namely, equal parts of tincture of cantharides, tincture of capsicum, and compound spirit of myrcia are correct. A few drops of it rubbed into the scalp every day does not produce rubefaction.

GOAT SERUM

To the Editor:—I am much interested in your statement, "In some experiments it has been found that goat serum in certain cases may be quite toxic." Can you give me reference to the experiments together with any further information on the toxic quality of antitoxin derived from goat serum when concentrated and added to diphtheria toxin for use in immunizing against diphtheria?

Millard Knowlton, M.D., Hartford, Conn.

Answer.—So far as known, there are no published observations on the toxicity of concentrated antidiphtheria goat serum used in connection with diphtheria toxin. There are observations, however, showing that goat serum may be toxic. Thus, Tunnicliff (Prevention of Measles by Immune Goat Serum, (*J. Infect. Dis.* **38**:48 [Jan.] 1926) found that the serum of one goat was toxic for nearly all the persons into whom it was injected; after standing eight months, however, the toxic action seemed to have been lost. The point is that the general assumption of the harmlessness of goat serum probably is not in accord with the real facts in the case. In the meantime this discussion is largely academic in interest because at present there is no goat antitoxin generally available.

TECHNIC OF THERAPY

To the Editor:—Kindly advise as to the usual procedure in giving the following by intramuscular injection; i. e., as to frequency: 1. Iron and ammonium citrate, ¼ grain; sodium arsenate, 1/50 grain, in secondary anemia. 2. One cc. ampules of extract of corpus luteum for relief of symptoms at menopause. How many ampules are considered a course? What is the number of courses usually necessary and the length of rest between them, if any? H. B. Chapin, M.D., Torrington, Conn.

Answer.—1. Iron and ammonium citrate with arsenic is injected intragluteally daily or every other day, usually in gradually ascending and then descending dosage from 0.01 up to 0.1 Gm. of the iron salt. The course should be extended for at least six weeks. A course of one or two weeks' duration usually produces little or no result. If, on the other hand, a six weeks' course has not secured the desired result, further treatment is not likely to be successful. During the first week the dose is gradually increased. It is then maintained at the height secured for three weeks, and then gradually reduced during the succeeding two weeks. Regularity of treatment is essential for good results. While the intramuscular injection of iron has become somewhat popular, there is, as a matter of fact, no good evidence for the use of this procedure rather than the customary oral administration.

2. Reliable experience and knowledge regarding the administration of corpus luteum for the relief of the symptoms of the menopause is lacking. There are, indeed, many good authorities who question the value of this treatment, excepting for the psychic effect. It is pointed out in New and Nonofficial Remedies that there is considerable evidence that the aqueous extracts prepared for hypodermic use are inert.

VACCINATION AND TOXIN-ANTITOXIN

To the Editor:—In a child who is to be vaccinated against smallpox and who is also to be given diphtheria toxin-antitoxin, does it make any difference as to which of these is given first? Please do not publish my name. M.D., Missouri.

Answer.—So far as known, it will not make any difference whether vaccination is carried out before or after immunization with diphtheria toxin-antitoxin.

Medical Education, Registration and Hospital Service

COMING EXAMINATIONS

American Board of Otolaryngology, Texas: Dallas, April 19.
California: San Francisco, April 27. Sec., Dr. H. H. Loeb, 1402 South Grand Boulevard, St. Louis, Mo.
Arkansas: Little Rock, May 11-12. Sec., Dr. J. W. Walker, Fayetteville. Homeo. Board, Little Rock, May 11. Sec., Dr. A. A. Pringle, Eureka Springs. Eclectic Board, Little Rock, May 11. Sec., Dr. Claude E. Laws, Fort Smith.
Colorado: Denver, April 6. Sec., Dr. David A. Strickler, 612 Empire Bldg., Denver.
District of Columbia: April 13. Sec., Dr. Edgar P. Copeland, 1801 Eye St., Washington, D. C.
Hawaii: Honolulu, April 12-15. Sec., A. L. Davis, 1254 Emma Street, Honolulu.
Idaho: Boise, April 6. Commissioner of Law Enforcement, F. A. Jeter, Boise.
Illinois: Chicago, April 6-8. Supt. Regis., Mr. V. C. Michels, Springfield.
Minnesota: Minneapolis, April 6-8. Apply to Mrs. Martha Lundgren, 734 Lowry Bldg., St. Paul.
Montana: Helena, April 6-8. Sec., Dr. S. A. Cooney, Helena.
National Board of Medical Examiners: Part I, June 21-23; Part II, June 22-23. All applications should be made on or before May 15. Sec., Dr. J. S. Rodman, 1600 Walnut Street, Philadelphia.
Nevada: Carson City, May 3. Sec., Dr. Simon L. Lee, Carson City.
New Mexico: Santa Fe, April 12-13. Sec., Dr. W. T. Joyner, Roswell.
Rhode Island: Providence, April 1-2. Sec., Dr. Byrum U. Richards, Providence.
Utah: Salt Lake City, April 6. Director, Mr. J. T. Hammond, Salt Lake City.

Arizona January Examination

Dr. W. O. Sweek, secretary of the Arizona Board of Medical Examiners, reports the written examination held at Phoenix, Jan. 5-6, 1926. The examination covered 10 subjects and included 100 questions. An average of 75 per cent was required to pass. Of the 7 candidates examined, 6 passed and 1 failed. One candidate was licensed by reciprocity. The following colleges were represented:

PASSED	Year Grad.	Per Cent
University of California Medical School	(1925)	85.8
Howard University School of Medicine	(1922)	75
University of Kansas School of Medicine	(1925)	90.4
Tulane University of Louisiana School of Medicine	(1922)	86.7
University of Michigan Medical School	(1923)	85.6
University of Nebraska College of Medicine	(1925)	85.7

FAILED	Year Grad.	Per Cent
St. Louis College of Physicians and Surgeons	(1910)	*

LICENSED BY RECIPROCITY	Year Grad.	Reciprocity with
University of Texas Department of Medicine	(1922)	Texas

* No grade given.

Rhode Island January Examination

Dr. B. U. Richards, secretary of the Rhode Island Board of Health, reports the written and practical examination held at Providence, Jan. 7-8, 1926. The examination covered 7 subjects and included 70 questions. An average of 80 per cent was required to pass. Seven candidates were examined, all of whom passed. The following colleges were represented:

PASSED	Year Grad.	Per Cent
Harvard University	(1922) 89.5, (1923)	80
Tufts College Medical School	(1924) 84.5, 87.3,	93.7
Jefferson Medical College of Philadelphia	(1924)	90.3
University of Naples, Italy	(1923)*	83.5

* Verification of graduation not completed by the American Medical Association.

Oregon January Examination

Dr. Urling C. Coe, secretary of the Oregon Board of Medical Examiners, reports the written examination held at Portland, Jan. 5-7, 1926. The examination covered 11 subjects and included 110 questions. An average of 75 per cent in each subject was required to pass. Thirteen candidates were examined, all of whom passed. Four candidates were licensed by reciprocity. The following colleges were represented:

PASSED	Year Grad.	Per Cent
Northwestern University Medical School	(1924) 77 (1925)*	80.6
Rush Medical College	(1921) 77.7 (1925)	77.1
University of Illinois College of Medicine	(1925)	82
University of Louisville School of Medicine	(1925)	78.8
Harvard University	(1921)	94.3

Cornell University Medical College	(1921)	80.3
University of Oregon Medical School	(1924) 81.4, (1925) 83.1,	84.9
University of W. Tennessee College of Med. and Surg.	(1923)	77.3
German University of Prague, Czechoslovakia	(1921)†	83

LICENSED BY RECIPROCITY

College	Year Grad.	Reciprocity with
Harvard University	(1923)	New York
University of Oregon Medical School	(1923)	Washington
Jefferson Medical College of Philadelphia	(1906)	Penna.
Vanderbilt University School of Medicine	(1913)	Texas

* This candidate has completed his medical course and will receive his M.D. degree on completion of a year's internship in a hospital.

† Verification of graduation not completed by the American Medical Association.

Book Notices

DISEASES OF INFANTS AND CHILDREN. By Henry Dwight Chapin, A.M., M.D., Consulting Physician to the New York Post-Graduate Hospital, and Lawrence Thomas Royster, M.D., Professor of Pediatrics and Head of the Pediatric Department of the University of Virginia. Fifth edition. Cloth. Price, $6. Pp. 633, with 162 illustrations. New York: William Wood & Co., 1925.

This edition is presented to its readers with the collaboration of a new editor. L. T. Royster has succeeded Godfrey Pisek, recently deceased. Portions of the book have been rewritten in the attempt to bring them to date. The introductory chapters on the care and hygiene of children and diseases of the new-born, and the section on growth and development, as well as the succeeding chapters on the examination of the sick child, general therapeutics and suggestions for diagnosis, are well written and contain valuable information. The chapter on the infant from the nutritional standpoint is a suggestive and original treatise, representing the authors' view on the biologic standards of infant feeding. In some of the clinical descriptions the text has suffered somewhat in the attempt to be concise, without being fully descriptive. Necessarily, in a book of this nature and size, details must be omitted. This is notably true in the description of the diseases of the digestive system. In a book on pediatrics, this important subject deserves more space and consideration than is given here. Taken as a whole, however, the book will give the student much of value, and the practitioner important information on diagnosis and treatment.

GRUNDRISS DER WISSENSCHAFTLICHEN ANATOMIE Zum Gebrauch neben jedem Lehrbuch der Anatomie für studierende und Aerzte. Von Dr. Wilhelm Lubosch, Professor der Anatomie in Würzburg. Paper. Price, 18 marks. Pp. 292, with 66 illustrations. Leipsic: Georg Thieme, 1925.

This represents an attempt of the professor of anatomy at Wurzburg to pass on to others what he has found most satisfactory in his study of anatomy as a science. The desire to understand leads to keen interest in the general principles of all sciences. Few sciences are as well adapted as anatomy to awaken and satisfy that interest, but Lubosch laments that its study is too often made drudgery, and that the student thus loses a great intellectual joy and satisfaction. This satisfaction Lubosch has found in seeing in the living human body the expression of these general principles and a working model of vital processes. He has devoted his lectures on anatomy to an endeavor to set forth these visions, and the book has resulted from the course of lectures. With the love of system that characterizes German professors in their philosophic reviews, he surveys the whole field and sets everything in order. First he considers the relations of this science to others, such as physiology, medicine and philosophy, and then proceeds to a systematization of the individual science, its scope and content. He divides the book into a general section and a special section. The general section includes his conception of living matter, its essence and character. Recognizing the philogenetic kinship of man with other animal forms, he surveys the principles of structure of living animals (especially vertebrates) and the changes that have led to the diversification of their structure. The principles of transformation of which these bodies are expressions are formulated and reviewed. The special section deals with the human body only. With considerations of the normal and the range of variation, with racial anatomy, symmetry and segmentation, it treats of development and the search for its productive causes in experimental embryology. A consideration of the morphology of tissues is followed by a similar study of cells, leading ultimately to an effort to relate cell structure to the colloidal structure of protoplasm. The author does not pretend to cover the great subjects of which he treats, but tries only to sketch in the line along which thought will naturally proceed. He includes references to the literature up to 1924, and has made or borrowed sixty-six figures, mostly schematic, to assist in the presentation of the ideas considered. Many of these were prepared for his lectures. Thoughtful students will welcome this book and others of its kind. It will help toward an understanding of anatomy and morphology, and toward an appreciation of the beauty of general, even if theoretical, explanations of morphologic facts.

SCOLIOSIS. Rotary Lateral Curvature of the Spine. By Samuel Kleinberg, M.D., F.A.C.S., Assistant Surgeon, New York Hospital for Ruptured and Crippled. Cloth. Price, $6. Pp. 311; with 140 illustrations. New York: Paul B. Hoeber, Inc., 1926.

In presenting the subject of scoliosis, the author reviews concisely the knowledge and experiences acquired during the last twenty years, avoiding the theoretical and discussing the practical and useful. The book is written primarily for the orthopedic surgeon, but is of great value to the general practitioner, because it is the latter who sees this type of patient long before the orthopedic surgeon. Much valuable time will be gained if the general practitioner has a working knowledge of the principles of diagnosis and treatment. There are excellent chapters on the anatomic and physiologic aspects of the condition. The author takes exception to the statement of Hibbs, that scoliosis is in the majority of cases a result of infantile paralysis. He is convinced that scoliosis is due to this disease in only a small percentage of cases. The author states how difficult the problem of scoliosis is, and then proceeds to prove how simple it is if his method is followed. He lays much emphasis on potential improvement in a large percentage of cases by corrective plaster-of-paris jackets and gymnastic exercises when correctly and judiciously applied in appropriate cases. In brief, his operative treatment is divided into three parts: the preoperative stage of from four to eight weeks of absolute recumbency on a Whitman frame, the body in extension-traction on the convex frame; the operative stage, consisting of an operation combining features of the Hibbs, Albee and Forbes methods; the postoperative stage of recumbency without apparatus for from seven to ten days, and then a gradual return to the preoperative treatment for eight weeks. After this a plaster jacket is applied and the patient is allowed to stand and go home, returning every two weeks for observation. The jacket remains on at least six months. A roentgenogram is made every month, and after from six to nine months a corset is supplied. The author believes that operation should be restricted to those cases in which there is a progressive increase of deformity irrespective of the etiologic basis of the scoliosis or of the age of the patient. If operation is performed, he advises against corrective exercises. In thirty-one of thirty-three cases, fixation, the object of operation, was obtained; there were two relapses. The book can be recommended highly to the medical student, to the general practitioner and to the orthopedic surgeon.

CLINICAL DISORDERS OF THE HEART BEAT. A Handbook for Practitioners and Students. By Sir Thomas Lewis, M.D., F.R.S., D.Sc., Consulting Physician to the Ministry of Pensions. Sixth edition. Cloth. Pp. 131, with 55 illustrations. London: Shaw & Sons, Ltd., 1925.

In the minds of most physicians, the name of Sir Thomas Lewis has been intimately associated with electrocardiography and research in connection with heart disease. It is a surprise to some, therefore, to learn that he has written an eminently practical book concerning the commoner irregularities of the heart, and, further, that in this book he purposely avoids reference to the electrocardiograph and only rarely calls in the aid of any other instrument of precision. His aim is, in other words, to discuss these conditions from the noninstrumental standpoint, and to show that they may be recognized and understood by careful observation and logical reasoning if only the fundamental principles of cardiac physiology and pathology have been previously mastered. That he has been successful is proved by the fact that in fifteen years six

editions of this book have been called for. In this edition the work has been brought down to date. All that has been said in reviews of previous editions in praise of the lucidity of style, conciseness and forcefulness may be here repeated. The work is written in the first person singular. We have counted the names of but few others in the whole work, incidentally mentioned: Purkinje, Cheyne-Stokes, Adams-Stokes. This means that the work is an individual one, expressing the views of Lewis and Lewis alone. The ego in the book is not, however, offensive, and for the general practitioner it is more useful than if written in a less dogmatic manner. It remains today one of the very best books on this subject, perhaps the very best.

MEDICAL OPHTHALMOLOGY. By R. Foster Moore, O.B.E., M.A., B.Ch., Assistant Ophthalmic Surgeon, St. Bartholomew's Hospital. Second edition. Cloth. Price, $6. Pp. 344, with 100 illustrations. Philadelphia: P. Blakiston's Son & Co., 1925.

To the first edition have been added sections on defects of the visual fields due to lesions of the temporal lobe; the normal pupillary reactions; intracranial aneurysms and subarachnoid hemorrhage; encephalitis; primary tumors of the optic chiasm; icterohemorrhagic jaundice, and juvenile and adolescent forms of cerebromacular degeneration. The book might well have been called "Ocular Manifestations in Systemic Disease." It deals briefly with changes in the eye which accompany the various diseases. There is an attempt to arrange the material as carefully as possible to conform to anatomic classification, and when this fails, the author has classified the diseases according to nutritional disorders, specific infections, congenital and hereditary conditions, effects of drugs, and parasites. The material presented is largely the author's experience in the wards of St. Bartholomew's and Moorfields. It is well presented, and the book should be of especial interest to medical students for reference, and to the internist.

DIAGNOSTISCHE UND THERAPEUTISCHE IRRTÜMER UND DEREN VERHÜTUNG. INNERE MEDIZIN. Herausgegeben von Prof. Dr. J. Schwalbe, Geh. San.-Rat in Berlin. Sechzehntes Heft. Die Krankheiten der Leber mit Einschuss der hepatolienalen Affektionen. Von Professor Dr. H. Eppinger, Assistent an der I. Medizinischen Klinik, und Dozent Dr. P. Walzel, Assistant an der I. Chirurgischen Klinik Eiselsberg in Wien. Paper. Price, 7.20 marks. Pp. 134, with 10 illustrations. Leipsic: Georg Thieme, 1926.

This is another of the useful, brief but practical discussions on the avoidance of common errors in the diagnosis and treatment of disease. The present number deals with diseases of the liver and spleen and, like its predecessor, may be recommended to the physican familiar with the German language.

INSECTS AND DISEASE OF MAN. By Carroll Fox, M.D., Surgeon, U. S. Public Health Service. Cloth. Price, $4 net. Pp. 349, with 92 illustrations. Philadelphia: P. Blakiston's Son & Co., 1925.

This is divided into two parts. The first part deals with medical entomology and contains a classification and descriptions of the life histories of the insects concerned with disease transmission, together with chapters on the arachnida and the rodents. The second part describes the insect borne diseases under headings such as epidemiology, recognition of the disease and methods of control. While the chapters on medical entomology are quite complete, those on insect borne diseases could well have been expanded to the benefit of the reader.

HANDBUCH DER SOZIALEN HYGIENE UND GESUNDHEITSFÜRSORGE. Herausgegeben von A. Gottstein, A. Schlossmann, L. Teleky. Erster Band. Grundlagen und Methoden. Bearbeitet von E. Dietrich, A. Grotjahn, V. Haecker, F. Hueppe, P. Krautwig, R. Martin, F. Prinzing, M. Vogel, W. Weinberg. Paper. Price, 30 goldmarks. Pp. 511, with 37 illustrations. Berlin: Julius Springer, 1925.

This is the first part of a comprehensively planned three-volume treatise on social hygiene along familiar German lines. It deals with the history of social hygiene by the veteran Hueppe, with the methods and technic of statistical inquiry including some discussion of data, and with problems of race and heredity, health education, official organization and the like. In the section on public health organization by Dietrich (pp. 432-438) Poland is given more space than England, and the United States is not mentioned.

Books Received

Books received are acknowledged in this column, and such acknowledgment must be regarded as a sufficient return for the courtesy of the sender. Selections will be made for more extensive review in the interests of our readers and as space permits.

AN ELEMENTARY COURSE IN TROPICAL HYGIENE. Part I. By Mary G. Blacklock, M.B., B.Sc., D.T.M., Lady Medical Officer, Sierra Leone, West African Medical Service. Preface by Andrew Balfour, C.B., C.M.G., M.D., Director, London School of Hygiene and Tropical Medicine. Paper. Price, 1 shilling net. Pp. 44, with 9 illustrations. London: John Bale, Sons & Danielsson, Ltd., 1926.

A pamphlet telling children in story form the important points of hygiene in warm climates.

INTESTINAL TUBERCULOSIS. Its Importance, Diagnosis and Treatment: A Study of the Secondary Ulcerative Type. By Lawrason Brown, M.D., Chairman of the Medical Board of the Trudeau Sanatorium, Saranac Lake, New York, and Homer L. Sampson, Roentgenographer of the Trudeau Sanatorium, Saranac Lake, New York. Cloth. Price, $4. Pp. 304, with 112 illustrations. Philadelphia: Lea & Febiger, 1926.

Conservative monograph, with excellent bibliography.

PRINCIPLES OF PHARMACY. By Henry V. Arny, Ph.M., Ph.D., F.C.S., Professor of Chemistry in the College of Pharmacy of Columbia University. Third edition. Cloth. Price, $8 net. Pp. 1078, with 289 illustrations. Philadelphia: W. B. Saunders Company, 1926.

New edition, based on the latest revision of the Pharmacopeia and including all recent discoveries.

OPERATIVE CYSTOSCOPY. By E. Canny Ryall, F.R.C.S., Founder of and Senior Surgeon to All Saints' Hospital for Genito-Urinary Diseases, London. Cloth. Price, $25. Pp. 47, with 670 illustrations. St. Louis: C. V. Mosby Company, 1925.

American edition of handsomely illustrated British guide to cystoscopy.

A HANDBOOK FOR SENIOR NURSES AND MIDWIVES. By J. K. Watson, M.D., Capt., R. A. M. C. Cloth. Price, $4. Pp. 554, with 178 illustrations. New York: Oxford University Press, 1926.

Much too much information for nurses and midwives, and some of it none too good.

PRACTICAL HELPS IN THE STUDY AND TREATMENT OF HEAD INJURIES. By Adolph M. Hanson, M.D. Cloth. Price, $3. Pp. 109, with 91 illustrations. Boston: Richard G. Badger, 1925.

Somewhat commonplace practical handbook.

SIMPATECTOMIA PERI-ARTERIAL. Por el Doctor Julio Cesar Rivas Morales y por el Doctor Domingo Luciani. Paper. Pp. 84, with 8 illustrations. Caracas, Venezuela, 1925.

Technical debate on a debatable surgical procedure.

PYGMALION. Or the Doctor of the Future. By R. M. Wilson, M.B., Ch.B. Cloth. Price, $1. Pp. 67. New York: E. P. Dutton & Co., 1926.

Reviewed editorially, February 6, p. 419.

TERAPÉUTICA GENERAL DE LA TUBERCULOSIS. Por el Dr. Rodolfo Eiselt, Profesor de la Facultad de Medicina de Carlos IV de Praga. Traducción del Profesor R. J. Slaby, revisada por los doctores Angel Pulido, secretario de la Real Academia de Medicina, y José Chabás, director de la Revista de Higiene y Tuberculosis de Valencia. Paper. Pp. 476. Barcelona, 1926.

PROYECTOS DE ORGANIZACION DE LA LUCHA ANTIPALÚDICA. Con aplicación a las condiciones hidrográficas y agrícolas de las distintas regiones de España. Por el Dr. C. Maturana Vargas. Trabajo premiado por la Real Academa Nacional de Medicina. Paper. Pp. 105. Madrid, 1925.

PROCEEDINGS OF THE PATHOLOGICAL SOCIETY OF PHILADELPHIA. Containing the transactions of the Society from January, 1924, to January, 1925. Edited by Morton McCutcheon, M.D., Recorder of the Society. Pp. 102. Philadelphia, 1925.

UNIVERSIDAD DE BARCELONA FACULTAD DE MEDICINA: INSITUTO DE FISIOLOGIA (SOSTENIDO POR LA DIPUTACIÓN PROVINCIAL). Trabajos publicados durnate el quinquenio 1920-1925. Barcelona, 1926.

ANNUAL REPORT OF THE COMMISSIONER OF CORRECTION. For the year ending November 30, 1924. The Commonwealth of Massachusetts. Boston, 1925.

AMERICAN DRUG MANUFACTURERS' ASSOCIATION. Fourteenth Annual Meeting, April, 1925. Pp. 398. New York.

EL PROBLEMA DE LA VEJEZ. Por el Doctor J. J. Vigas. Paper. Pp. 22. Caracas, Venezuela, 1925.

Medicolegal

Liability for Medical and Hospital Services

(Irwin v. McDougal et al. (Mo.), 274 S. W. R. 923)

The Springfield (Mo.) Court of Appeals says that in this action, brought by a married woman to recover damages for personal injuries sustained in an automobile accident, the instructions given to the jury authorized it in assessing damages to include bills for medical attention and hospital services. That was error. The married woman's act of Missouri, which authorizes a married woman to contract as a *femme sole* (unmarried or single woman) and makes her separate earnings her own property, does not change the common-law rule by which the husband is primarily liable for the support of his wife, which includes medical attention and hospital service. Had the plaintiff paid these bills, she could recover them in this action. There was no evidence in this case, however, to show that the plaintiff paid, or incurred personal liability for, the medical and hospital bills made necessary by her injury. In the absence of such showing, the liability for those items rested primarily on her husband, and the right of action to recover therefor was in him and not in the plaintiff.

"Sound Health" Properly Defined

(National Life & Acc. Ins. Co. v. Smith (Ga.), 129 S. E. R. 113)

The Court of Appeals of Georgia, division 2, in affirming a judgment in favor of the beneficiary under a life insurance policy, says that it appeared from the evidence that the jury was authorized to find that the insured was in sound health at the time of the issuance of the policy. The term "sound health," as used in a life insurance policy which provides that there shall be no liability under the policy if the insured is not in sound health at the date of the issuance of the policy, is properly defined in the charge of the court as follows:

> If the insured enjoyed such health and strength as to justify the reasonable belief that she is free from derangement of organic functions, or free from symptoms calculated to cause reasonable apprehension of such derangement, and to ordinary observation and to outward appearance her health is reasonably such that she may with ordinary safety be insured and on ordinary terms, the requirement of good health is satisfied. . . . The term "sound health," or "good health," used in a policy, means that the applicant has no grave impairment or serious disease, and is free from any ailment that seriously affects the general soundness and healthfulness of the system.

Under this definition, "sound health" consists, not alone in the outward appearance of sound health, but also in a reasonable freedom from physical derangement and impairment as defined above.

Apprehensions of Injured Woman Not Compensable

(Nevala v. City of Ironwood (Mich.), 205 N. W. R. 93)

The Supreme Court of Michigan says that the plaintiff brought this action to recover damages on account of having broken her left leg, owing to the alleged improper condition in which the city had negligently left a sidewalk. At the time of the accident she was pregnant. She testified that she suffered fear of a miscarriage, worried over the possibility that the child might be deformed by the injury she received, and the labor of childbirth was prolonged and rendered more difficult by her inability to move the broken leg. There was no miscarriage and no deformity occasioned the child by the injuries to the plaintiff. At the trial the defendant asked for the exclusion of this element of pain and suffering, but the testimony was admitted; and, because it was, the judgment which was rendered for the plaintiff is reversed and a new trial granted. If the pains of childbirth were enhanced in consequence of the injuries, that would constitute a proper subject of compensation. But the plaintiff's apprehension of a miscarriage or of the possibility of the deformity of the child she was carrying at the time of the accident was not a subject for the consideration of the jury in awarding compensation.

Society Proceedings

COMING MEETINGS

AMERICAN MEDICAL ASSOCIATION, Dallas, April 19-23. Dr. Olin West, 535 N. Dearborn Street, Chicago, Secretary.

Alabama, Medical Association of the State of, Mobile, April 27-30. Dr. D. L. Cannon, 519 Dexter Avenue, Montgomery, Assistant Secretary.

American Association for the Study of Allergy, Dallas, April 20. Dr. A. H. Rowe, 242 Moss Avenue, Oakland, Calif., Secretary.

American Association of Genito-Urinary Surgeons, Hot Springs, Va., May 10-12. Dr. H. G. Bugbee, 40 E. 41st Street, New York, Secretary.

American Association of Industrial Physicians and Surgeons, Philadelphia, May 24-26. Dr. F. L. Rector, 22 East Ontario Street, Chicago, Secretary.

American Bronchoscopic Society, Montreal, Canada, May 29. Dr. Henry B. Orton, 671 Broad Street, Newark, N. J., Secretary.

American Child Health Association, Atlantic City, May 17-22. Dr. S. J. Crumbine, 370 7th Ave., New York City, Secretary.

American Dermatological Association, Niagara Falls, Canada, May 27-29. Dr. C. Guy Lane, 416 Marlborough Street, Boston, Secretary.

American Gastro-Enterological Association, Atlantic City, May 3-4. Dr. John Bryant, 338 Marlborough Street, Boston, Secretary.

American Gynecological Society, Stockbridge, Mass., May 20-22. Dr. A. H. Curtis, 104 S. Michigan Ave., Chicago, Secretary.

American Orthopedic Association, Atlanta, April 26-28. Dr. De Forest P. Willard, 1630 Spruce Street, Philadelphia, Secretary.

American Proctologic Society, Indianapolis, April 16-17. Dr. William A. Rolfe, 331 Beacon Street, Boston, Secretary.

American Roentgen Ray Society, Detroit, May 18-22. Dr. C. L. Martin, Baylor Hospital, Dallas, Texas, Secretary.

American Society of Clinical Investigation, Atlantic City, May 3. Dr. J. H. Austin, University of Pennsylvania, Philadelphia, Secretary.

American Society of Clinical Pathologists, Dallas, April 15-17. Dr. Ward T. Burdick, Metropolitan Building, Denver, Colo., Secretary.

American Surgical Association, Detroit, May 24-26. Dr. R. B. Greenough, 8 Marlborough Street, Boston, Secretary.

American Urological Association, Boston, May 17-19. Dr. H. G. Hamer, 723 Hume-Mansur Building, Indianapolis, Ind., Secretary.

Arizona Medical Association, Globe, April 25-27. Dr. D. F. Harbridge, 407 Goodrich Building, Phoenix, Secretary.

Arkansas Medical Society, Hot Springs, May 18-20. Dr. W. R. Bathurst, 810 Boyle Building, Little Rock, Secretary.

Association for the Study of Internal Secretions, Dallas, April 20. Dr. F. M. Pottenger, Title Insurance Building, Los Angeles, Secretary.

Association of American Physicians, Atlantic City, May 4-5. Dr. F. W. Peabody, Boston City Hospital, Boston, Secretary.

California Medical Association, Oakland, April 26-May 1. Dr. Emma W. Pope, 593 Market Street, San Francisco, Secretary.

Conference of State and Provincial Health Authorities, Atlantic City, N. J., May 21-22. Dr. Richard M. Olin, State Commissioner of Health, Lansing, Mich., Secretary.

Connecticut State Medical Society, New Haven, May 19-20. Dr. C. W. Comfort, Jr., 27 Elm Street, New Haven, Secretary.

Florida Medical Association, Gainesville, May 3-5. Dr. Shaler Richardson, 111 W. Adams Street, Jacksonville, Secretary.

Georgia, Medical Association of, Albany, May 12-15. Dr. A. H. Bunce, 65 Forrest Avenue, Atlanta, Secretary.

Hawaii Territorial Medical Association, Honolulu, April 25-28. Dr. F. J. Pinkerton, 46 Young Building, Honolulu, Secretary.

Illinois State Medical Society, Champaign, May 18-20. Dr. H. M. Camp, Lahl Building, Monmouth, Secretary.

Iowa State Medical Society, Des Moines, May 12-14. Dr. T. B. Throckmorton, Bankers Trust Building, Des Moines, Secretary.

Kansas Medical Society, Kansas City, May 4-6. Dr. J. F. Hassig, 804 Elks Building, Kansas City, Secretary.

Louisiana State Medical Society, Monroe, April 15-17. Dr. P. T. Talbot, 1551 Canal Street, New Orleans, Secretary.

Maryland, Medical and Chirurgical Faculty of, Baltimore, April 27-29. Dr. J. A. Chatard, 1211 Cathedral Street, Baltimore, Secretary.

Medical Women's National Association, Dallas, April 18-19. Dr. Lena K. Sadler, 533 Diversey Parkway, Chicago, Secretary.

Minnesota State Medical Association, St. Paul, May 17-19. Dr. E. A. Meyerding, 11 W. Summit Avenue, St. Paul, Secretary.

Mississippi State Medical Association, Jackson, May 11-13. Dr. T. M. Dye, McWilliams Building, Clarksdale, Secretary.

Missouri State Medical Association, St. Louis, May 17-20. Dr. E. J. Goodwin, 901 Missouri Building, St. Louis, Secretary.

Nebraska State Medical Association, Omaha, May 11-13. Dr. R. B. Adams, McKinley Building, Lincoln, Secretary.

New Hampshire Medical Society, Concord, May 25-26. Dr. D. E. Sullivan, 7 North State Street, Concord, Secretary.

New Mexico Medical Society, Albuquerque, May 19-21. Dr. C. M. Yater, 310 N. Richardson Avenue, Roswell, Secretary.

North Dakota State Medical Association, Minot, May 25-26. Dr. A. J. McCannell, Minot, Secretary.

Ohio State Medical Association, Toledo, May 11-13. Mr. Don K. Martin, 131 E. State Street, Columbus, Executive Secretary.

South Carolina Medical Association, Sumter, April 6-8. Dr. E. A. Hines, Seneca, Secretary.

South Dakota State Medical Association, Aberdeen, May 19-20. Dr. John F. D. Cook, Langford, Secretary.

Tennessee State Medical Association, Memphis, May 11-13. Dr. J. F. Gallagher, Jackson Building, Nashville, Secretary.

Texas, State Medical Association of, Houston, May 24-27. Dr. Holman Taylor, 207½ West 11th Street, Fort Worth, Secretary.

Utah State Medical Association, Salt Lake City, May 6-8. Dr. F. B. Steele, Boston Building, Salt Lake City, Secretary.

West Virginia State Medical Association, Morgantown, May 25-27. Mr. S. O. Neale, 211 Smallridge Building, Charleston, Executive Secretary.

Current Medical Literature

AMERICAN

The Association library lends periodicals to Fellows of the Association and to individual subscribers to THE JOURNAL in America for a period of three days. No foreign journals are available prior to 1921, nor domestic prior to 1924. Periodicals published by the American Medical Association are not available for lending, but may be supplied on order. Requests should be accompanied by stamps to cover postage (6 cents if one and 12 cents if two periodicals are requested).

Titles marked with an asterisk (*) are abstracted below.

Annals of Surgery, Philadelphia

73: 1-160 (Jan.) 1926

Diverticula of Esophagus. C. Jackson and T. A. Shallow, Philadelphia.—p. 1.
Odontoid Ossicle of Second Cervical Vertebra. T. W. Todd and J. D'Errico, Cleveland.—p. 20.
*Danger in Use of Lipiodol in Diagnosis of Obstructive Lesions of Spinal Canal. W. Sharpe and C. A. Peterson, New York.—p. 32.
*Radical Breast Operation with Endotherm Knife (Acusector) and Without Ligatures. H. A. Kelly and G. E. Ward, Baltimore.—p. 42.
*Treatment of Gallstones. K. H. Digby, Hong Kong, China.—p. 47.
*Rupture of Intrahepatic Bile Duct with Fatal Peritonitis. W. Smith, Ladysmith, Wis.—p. 55.
Mechanism of Intestinal Perforation Due to Distention. F. T. van Beuren, Jr., New York.—p. 69.
*Iliohypogastric Nerve in Relation to Herniotomy. E. Andrews, Chicago.—p. 79.
*Multiple Sacs in Inguinal Hernia. A. McQueeney, Bridgeport, Conn.—p. 81.
Dislocation of Shoulder. J. H. Stevens, Boston.—p. 84.
Arthrodesis of Elbow. A. P. C. Ashurst, Philadelphia.—p. 104.
Repair of Wounds of Flexor Tendons of Hand. J. H. Garlock, New York.—p. 111.
*Skin Flap Cover for Projecting Intestine. M. E. Steinberg, Portland, Ore.—p. 123.
Perineal Elevator. C. Y. Bidgood, Hartford, Conn.—p. 126.
*Stitch Interpolation in Arterial and Venous Anastomosis. C. Deedera, New York.—p. 131.

Danger of Lipiodol Injections into Spinal Canal.—One cc. of the iodized oil preparation of lipiodol, as manufactured by L. Lafay, Paris, and considered nonirritating to spinal structures, was injected by Sharpe and Peterson by lumbar or cisterna magna puncture into the spinal theca of three patients. The results were of definite diagnostic value in all three cases, but in one case such an inflammatory reaction occurred to the arrested lipiodol at the site of the spinal block in the middorsal area that the patient's symptoms and signs were aggravated to a degree necessitating its removal at a later operation of laminectomy, at which were disclosed two encysted globules of lipiodol surrounded by numerous newly formed adhesions. Roentgenograms of all three patients revealed the unabsorbed lipiodol in the spinal canal, even after an interval of fifteen months following the injection.

Advantages of Acusector.—The advantages accruing from the use of the acusector, according to Kelly and Ward, are: lymphatics, capillaries and small blood vessels are sealed, limiting the number of clamps applied; few or no ligatures are used. Primary union is the rule; the actual depth of tissue destruction on each side of the acusector is 0.1 mm. It is suggested that primary union is promoted because of sterilization of the skin edges.

Treatment for Gallstones.—Digby advocates the following principles in the treatment of cholelithiasis: Operation should be undertaken as soon as a reasonably probable diagnosis of gallstones has been reached. Very free exposure of the biliary tract is desirable, preferably by an angled incision, such as Perthes'. The bile duct should be opened just above the duodenum as a routine measure and the main ducts explored thoroughly from within as well as from without. The removal of the gallbladder and cystic duct should generally though not invariably be practiced, the use of a metal T tube protecting the main ducts from risk of injury.

Rupture of Intrahepatic Bile Duct.—Smith reports an instance of spontaneous perforation of an intrahepatic bile duct, following complete obstruction of the common duct. When perforation occurred, the general peritoneal cavity was flooded with infected bile, and a fulminating peritonitis resulted.

Iliohypogastric Nerve in Relation to Herniotomy.—Andrews interprets the results of his experiments by assuming that the iliohypogastric nerve is motor to the lower fibers of the internal oblique muscle, but that all the motor fibers are given off before the nerve enters the field of operation for hernia, and that, therefore, accidental section of this nerve will not cause any paralysis of this muscle.

Multiple Sacs in Inguinal Hernia.—McQueeney believes that careful examination of cases of inguinal hernia will reveal a large percentage with two sacs—an indirect thin walled sac and a direct fatty sac. During the last four years, nine cases, approximately 7 per cent, with multiple sacs have been noted in a total of 129 cases of various kinds of hernia. Multiple sacs were usually found in fat persons between the ages of 35 and 50.

Skin Flap Cover for Projecting Intestine.—Steinberg describes a method to bring the hollow viscera outside of the abdomen in such a manner as to cause a permanent protrusion beyond the plane of the abdominal wall. The peritoneal lining of the viscus is surrounded with pedicled flaps of skin taken from the abdominal wall. It is suggested that the method might be valuable in performing a colostomy.

Stitch Interpolation in Blood Vessel Anastomosis.—The rule given by Deedera as applicable to venous suture is as follows: The depth of the stitch behind the free margin should be equal to the distance between the stitches. This means that when the suture is drawn to close the line of repair, the tissue between opposite stitch holes is double the amount of tissue between adjacent stitch holes. The slight increase in mass of tissues in apposition is sufficient to exert pressure laterally and thus counteract the tendency to constriction of the lumen.

Journal of Experimental Medicine, Baltimore

43: 1-142 (Jan.) 1926

*Chemical Study of Specific Elements of Tuberculin. I. J. H. Mueller, Boston.—p. 1.
Id. II. Preparation of Residue Antigen from Old Tuberculin. J. H. Mueller, Boston.—p. 9.
*Hemolytic Streptococci in Acute Rheumatic Fever: Analysis of Antigenic Relationships Existing Among Certain Strains. C. H. Andrewes, C. L. Derick and H. F. Swift, New York.—p. 13.
*Production of Albuminuria by Renal Vasoconstriction in Animals and Man. I. Starr, Jr., Philadelphia.—p. 31.
Stability of Acid-Base Equilibrium of Blood in Pregnancy Animals. W. deB. MacNider, Chapel Hill, N. C.—p. 53.
Studies on Roentgen-Ray Effects. XIV. Effect on Division Rate of Paramecium. R. T. Hance and H. Clark, New York.—p. 61.
*Bacteriophage of d'Herelle. V. Effect of Electrolytes on Rate of Inactivation of Bacteriophage by Alcohol. J. J. Bronfenbrenner and C. Korb, New York.—p. 71.
*Production of Purpura by Derivatives of Pneumococcus. L. A. Julianelle and H. A. Reimann, New York.—p. 87.
*Id. II. Effect of Pneumococcus Extract on Blood Platelets and Corpuscles. H. A. Reimann and L. A. Julianelle, New York.—p. 97.
Serologic Relationships of Type Specific and Degraded Pneumococci. H. A. Reimann, New York.—p. 107.
*Thymectomy in Rabbit. C. M. Van Allen, New York.—p. 119.
Surface Composition of Normal and Sensitized Mammalian Blood Cells. S. Mudd and E. B. H. Mudd, Philadelphia.—p. 127.

Specific Elements of Tuberculin.—A nonprotein gum has been isolated by Mueller from broth filtrates of human tubercle bacilli grown on a simple medium. It fixes complement and precipitates in high dilution in the presence of homologous immune serum, but fails to give a skin test in tuberculous animals. The preparation and some of the chemical properties of the substance are described.

Streptococci in Acute Rheumatic Fever.—Thirteen strains of hemolytic streptococci isolated by Andrewes, Derick and Swift from patients with acute rheumatic fever did not show any evidence of being related serologically.

Renal Vasoconstriction Causes Albuminuria.—Experiments are described by Starr which show that agents causing renal vasoconstriction also cause transient albuminuria in anesthetized eviscerated dogs. Evidence was obtained that ephedrine is not intrinsically injurious to the kidney. The observed facts may be explained by the conception that renal vasoconstriction causes increase in the duration and extent of the normal intermittent interruptions in the glomerular circulation. Permeability of the glomerular membranes is so increased by these lengthened interruptions that when blood flow is reestablished, albumin escapes. It is believed that this

conception may apply to those albuminurias in man which result from excessive muscular exercise or emotion or which are produced reflexly. It may explain the occurrence of albumin in the urine of normal people and in healthy laboratory animals; it may play a part in the explanation of the albuminuria which occurs after anesthesia or in cardiac decompensation. Its possible relation to orthostatic albuminuria is discussed.

Inactivation of Bacteriophage.—Bronfenbrenner and Korb found that addition of neutral salts to the lytic filtrate results in an increased rate of inactivation of the latter when alcohol is added to it. This effect of salts is the more marked the higher the valency of the cation. Conversely, removal by dialysis of salts originally present in the lytic filtrate tends to render the lytic agent less sensitive to alcohol. It appears that inactivation of the lytic agent by alcohol depends directly on the rate of precipitation of the coagulable constituents of the medium, and is not the result of a direct toxic action of alcohol on "bacteriophagum intestinale." These results speak in favor of the chemical nature of the agent of transmissible lysis.

Pneumococcus Extracts Produce Purpura.—Pneumococcus extracts have been shown by Julianelle and Reimann to be capable of producing hemorrhagic purpura in white mice, rabbits, and guinea-pigs. The purpura producing principle resists heating to 100 C. for ten minutes: it resists oxidation; it is filter passing; its activity is destroyed by digestion with trypsin; it is obtained from pneumococcus extracts by full saturation with ammonium sulphate after the acetic acid precipitable substances have been removed from the extracts. The purpura producing principle is common to all four types of pneumococcus and apparently bears no relation to virulence. This principle is not associated with the hemotoxin of pneumococcus, since the hemolytic activity of an extract may be destroyed without effect on the ability to cause purpura.

Effect of Pneumococcus Extract on Blood Cells.—A study has been made by Reimann and Julianelle on the variation in number of the blood platelets, and the erythrocytes and leukocytes of white mice injected with pneumococcus extract. The blood platelets were greatly diminished after the injection, the greatest decrease usually occurring after twenty-four hours. Purpuric lesions usually developed when the number of blood platelets became less than 500,000 per cubic millimeter. Regeneration of the platelets was accomplished by the fourth to the ninth day but there was an overregeneration and the return to normal did not take place until two weeks had elapsed. The erythrocytes were also greatly reduced in number but the rate of their destruction and regeneration was somewhat slower than that of the platelets. The leukocytes were slightly, if at all, influenced by the pneumococcus extract. Pneumococcus extracts were shown to be thrombolytic and hemolytic. Heat destroyed the activity of both the lysins in vitro. Heated extract produced purpura in mice but did not cause a severe anemia. Extracts adsorbed with either blood platelets or erythrocytes showed a marked diminution in their thrombolytic and hemolytic activity in vitro. Such extracts, however, produced purpura as well as severe anemia and thrombopenia in mice.

Thymectomy in Rabbit.—The object of Van Allen's investigation was to determine whether the thymus could be removed completely from rabbits of certain ages without producing any serious disturbance of health which would interfere with their use in other experiments or complicate the interpretation of results. It was found that this could be done.

Journal of Laboratory and Clinical Medicine, St. Louis

11: 307-404 (Jan.) 1926

*Diagnostic Value of Cerebrospinal Fluid Sugar Content. W. P. Stowe, Rochester, N. Y.—p. 307.
How Can We Best Promote Objects Contained in Article Two of Our Constitution? H. Spitz, Nashville, Tenn.—p. 312.
*Pharmacology of Benzyl Alcohol: Its Esters. V. Sodium Benzyl Succinate "Benzycin" and Sodium Dibenzyl Phosphate "Benzyphos." C. M. Gruber, St. Louis.—p. 318.
*Glycolysis at Varying Blood Sugar Levels. I. I. Lemann and R. T. Liles, New Orleans.—p. 339.
Therapeutic Dyes. I. Mercurochrome-220 Soluble. R. W. French, Washington, D. C.—p. 349.
*Polychrome Stains. I. Substitute for Giemsa's Stain. R. W. French, Washington, D. C.—p. 352.
*Basal Metabolism. VIII. Tables of Values of Du Bois Surface Area Formula. W. H. Stoner, Philadelphia.—p. 355.
*Stability of Standard Kahn Antigen. P. L. Kendrick and D. Jenks, Lansing, Mich.—p. 369.
Outfit for Collection of Serum by Physicians for Dark-Field Examination in Suspected Syphilis. W. R. Stokes and C. L. Ewing, Baltimore.—p. 732.
Blood Uric Acid. Comparative Results by Three Methods, and Technic Necessary for Accurate Estimation. W. P. Holbrook and H. D. Haskins, Portland, Ore.—p. 377.
*Method for Staining Nerve Cells en Block with Basic Aniline Dyes. F. Proescher and A. S. Arkush, Agnew, Calif.—p. 382.
Method of Blood Grouping Where Only One Known Group Is Available. W. L. Vogel, Riverside, Calif.—p. 386.

Cerebrospinal Fluid Sugar Content.—Stowe places the sugar content of normal cerebrospinal fluid in the neighborhood of 75 mg. per hundred cubic centimeters. In cases of neurosyphilis, lethargic encephalitis and other neurologic and nonneurologic conditions, other than the meningitides, the deviation from the normal range and median point is so slight as to be without diagnostic significance. Tuberculous meningitis gives values so definitely above the purulent meningitis cases and so definitely below all other conditions that an almost certain diagnosis can be made quickly in this disease. The occasional purulent fluids obtained after intraspinous therapy, in brain tumor cases with necrosis or hemorrhage near the ventricles and in sympathetic aseptic meningitis, can be delimited rapidly by their normal sugar content from infective meningitis in which the causative organism may not be found promptly. The presence of pus cells alone in the cerebrospinal fluid does not reduce its sugar content. Two of Stowe's cases are interesting in that obstruction to the flow of cerebrospinal fluid at the base of the brain in the one and at the lower dorsal spinal level in the other did not produce any essential difference in the sugar content above and below the lesion. This would suggest that the diffusion of sugar into the cerebrospinal fluid occurs throughout the cerebrospinal axis rather uniformly and not through the choroid plexus alone.

Pharmacology of Benzyl Alcohol.—Gruber's results with the water soluble benzyl derivatives, sodium benzyl succinate and sodium dibenzyl phosphate, confirm former views that the benzyl esters are extremely unreliable for reducing blood pressure. More than 67 per cent of the injections of the former and 35 per cent of the injections of the latter resulted in increased blood pressure. Benzyl alcohol, benzoate and acetate produced rises in blood pressure in 8 per cent of the injections. If a sufficient dose is given to produce a fall in blood pressure, the first effect on the cardiovascular system appears to be slowing the rate and dilatation of the heart with weakened contraction. The respiratory center is always first to be affected, in all injections. Usually there is acceleration in rate preceding the paralysis. It succumbs readily to comparatively small doses and is affected long before the heart is involved. The heart frequently beats some minutes after cessation of respiration. Occasionally an asphyxial rise in blood pressure is noted after cessation of respiration, showing that the vasomotor center has not been paralyzed simultaneously with the respiratory center. Sodium dibenzyl phosphate was found to be more toxic and consequently more depressant to all tissues tested than was sodium benzyl succinate.

Glycolysis at Varying Blood Sugar Levels.—This report by Lemann and Liles indicates that glycolysis proceeds at a lessened rate when the level of blood sugar is raised, not only by glucose (or other food) ingestion, but also by intravenous glucose infusion. The characteristic behavior of glycolysis in diabetic blood specimens may be related to the quantitative level of the blood sugar rather than to any essential quality of the blood. Administration of insulin does not affect the characteristic behavior of glycolysis either in diabetic or in nondiabetic blood. No important rôle is to be attributed to oxalate in evaluating the inhibition of glycolysis.

Substitute for Giemsa Stain.—The substitute for Giemsa stain submitted by French has the following composition: eosin, 1.25 Gm.; methylene blue, 1.25 Gm.; methylene azure A (MacNeal), 0.75 Gm.; methylene violet (Bernthsen), 0.25 Gm.;

methyl alcohol, absolute, 375.0 cc.; glycerin (anhydrous), 125.0 cc. The proportion of the components is the same as that used by MacNeal in the tetrachrome stain, though the concentration is much greater to allow of the customary Giemsa technic. These proportions are said to give the correct blue elements for a complete differential staining of the basic components.

Basal Metabolism Studies.—Values of the DuBois formula for human surface area are tabulated by Stoner by unit centimeter and kilogram intervals for individuals of from 110 to 200 cm. in height and of from 20 to 100 Kg. in weight.

Stability of Standard Kahn Antigen.—Kendrick and Jenks recommend their zinc method for use whenever it is necessary to make a check on the results by the direct method. It is much cheaper and a little quicker than the silver lactate method.

Methylene Azur Stain for Nerve Cells.—Proescher and Arkush have found that methylene azur (thiazin red) and toluidin blue are the only stains of value. They recommend methylene azur, which can be easily prepared in any desired quantity from methylene blue by oxidation with sodium peroxide. The crude methylene azur should be recrystallized, at least three times, from redistilled alcohol. The dyes are dissolved in alkalized chemically pure ethyl or methyl alcohol. They have adjusted the alcoholic solution to ion concentrations varying from p_H values of 7.4 to 12.

FOREIGN

An asterisk (*) before a title indicates that the article is abstracted below. Single case reports and trials of new drugs are usually omitted.

British Journal of Anaesthesia, Manchester

3: 109-164 (Jan.) 1926

Carbon Dioxide in Anesthesia. S. R. Wilson.—p. 112.
Cerebral Hemorrhage During Local Anesthesia. W. J. McCardie.—p. 119.
Gas and Oxygen Anesthesia in Relation to Its Safety to Patient. J. R. Mackenzie.—p. 122.
Post-Anesthetic Toxemias. S. R. Wilson.—p. 126.
Nitrous-Oxide-Acetylene-Oxygen Anesthesia for Extraction and Oral Surgery. A. Goldman and J. D. Goldman.—p. 133.

British Journal of Ophthalmology, London

10: 65-112 (Feb.) 1926

Inflammatory Pseudo-Tumor of Orbit. F. A. Williamson-Noble.—p. 65.
Two Cases of Cerebral Aneurysm Causing Ocular Symptoms. J. A. Conway.—p. 78.

British Medical Journal, London

1: 175-224 (Jan. 30) 1926

New Outlook on Cancer. W. Cramer.—p. 175.
*Surgical Treatment of Angina Pectoris. D. Danielopolu.—p. 180.
Case of Abdominal Torsion of Omentum. F. R. Brown.—p. 183.
*Method of Estimating Size of Enlarged Prostate. C. Fenwick.—p. 184.
Operative Treatment of Acute Perforated Ulcer of Stomach and Duodenum: Sixty-Seven Cases. A. J. Evans.—p. 184.
*Treatment of Threatened Gangrene of Arm Due to Injury of Main Artery. P. McEwan.—p. 186.
Common Sense. L. G. J. Mackey.—p. 211.
Prophylactic Value of Scarlet Fever Antitoxin. D. C. Kirkhope.—p. 214.
Novarsurol and Other Diuretics in Cardiac Edema. R. Howarth.—p. 186.
Escape from Sympathetic Ophthalmia. L. L. Steele.—p. 187.
Torsion of Fallopian Tube. J. C. Gillies.—p. 187.

Surgical Treatment of Angina Pectoris.—Danielopolu does not agree with Mackenzie that anginal patients should never be treated surgically. The Jonnesco method involving the removal of the stellate ganglion may, perhaps, be abandoned, but the method Danielopolu suggests is said to be far more hopeful, and offers much promise in practice. It consists of intercepting the maximum number of the sensory cardio-aortic fibers without interference with the important groups of the cardiac accelerators. Jonnesco's operation, in which the stellate ganglion is removed, does not fulfill these conditions.

Estimating Size of Prostate.—Fenwick measures the width, length and thickness of the prostrate in a very simple manner by means of probes and then constructs a model with dental wax.

Treatment of Threatened Gangrene.—In two cases cited McEwan made very free incisions in the deep fascia over the whole area of tension. The results are taken to mean that relief of tension was the essential point in treatment. The absence of interference with the actual lesion of the artery, leaving the collateral circulation as intact as possible, contributed to the successful result.

Glasgow Medical Journal

105: 1-80 (Jan.) 1926

Clinical Aspects of Ischemic Necrosis of Heart Muscle. A. G. Gibson.—p. 1.
Electrocardiographic Evidence of Myocardial Disease. J. Cowan.—p. 4.
Diseased Gallbladder. C. Bennett.—p. 17.
Psychologic Factor in Physical Disease. D. Yellowlees.—p. 31.

Journal of Anatomy, London

60: 122-232 (Jan.) 1926

Modern Egyptian Cranium. S. Smith.—p. 122.
Superficial Venous System of Lower Extremity. C. Kosinski.—p. 131.
Innervation of Ventricle of Human Heart. A. Blackhall-Morison.—p. 143.
*Rare Type of Congenital Club Hand. H. W. Jones and R. E. Roberts.—p. 146.
Congenital Absence of Middle Turbinate Bone Associated with Precocious Ossification of Limb Bones in Stillborn Female. H. A. Harris.—p. 149.
Pelvic and Thigh Muscles of Ornithorhynchus. H. S. Pearson.—p. 152.
Orbito-Ethmoidal Region in Cyclostomata, Plagiostomi and Teleostomi. E. P. Allis, Jr.—p. 164.
Hyomandibula of Selachii, Teleostomi and Ceratodus. F. H. Edgeworth.—p. 173.
Valve in Splenic and Mesenteric Veins of Sheep. K. J. Franklin.—p. 194.
Rotary Movements of Wrist. E. F. Cyriax.—p. 199.
Transposition of Abdominal Viscera. N. Pan.—p. 202.
Action of Roentgen Rays on Developing Chick Embryo. H. A. Colwell, R. J. Gladstone and C. P. G. Wakeley.—p. 207.
Three Cases of Right-Sided Sigmoid Colon. B. Bhattachayya.—p 229.

Congenital Clubhand.—A case of defect of the ulna, associated with syndactylism and partial ectrodactylism is reported by Jones and Roberts. The arm was normal as far as the elbow but beyond this the forearm was markedly shortened and bowed outward—while the hand was represented by two fingers fused together, but with separate nails, the smaller one being on the outer side. The other hand and the feet were normal.

Journal of Pathology and Bacteriology, Edinburgh

29: 1-140 (Jan.) 1926

Identification of So-Called B. Mycoides Corallinus as Streptothrix. V. B. Reader.—p. 1.
*Production of Experimental Endocarditis with Pneumococci and Streptococci in Immunized Animals. H. D. Wright.—p. 5.
Inhibition of Bacterial Growth by Some Amino-Acids; Tryptic Digests as Culture Mediums. J. Gordon and J. W. M'Leod.—p. 13.
Laboratory Epidemic in Rats Due to Gaertner's Bacillus. N. D. Ball and C. Price-Jones.—p. 27.
Antigenic Value of Toxin-Antitoxin Precipitate of Ramon. A. T. Glenny, C. G. Pope, H. Waddington and U. Wallace.—p. 31.
*Sacrococcygeal Chordoma. M. J. Stewart and J. E. Morin.—p. 41.
Id. W. A. Alexander and H. W. Struthers.—p. 61.
*So-Called Calcification in Basal Ganglia of Brain. E. W. Hurst.—p. 65.
*Experiments on Influence of Fatigue on Infection. A. E. Boycott and C. Price-Jones.—p. 87.
*Nature of Movements of Omentum. G. Florey, J. L. Walker and H. M. Carleton.—p. 97.
*Action of Extracts of Mesenteric Lymph Glands on Leukocytes. R. G. Mole.—p. 107.
Number of Lymphoid Follicles of Human Large Intestine. C. Dukes and H. J. R. Bussey.—p. 111.
Dissecting Diverticula of Appendix. J. A. Jenkins.—p. 118.
Combined Schick Test and Diphtheria Prophylactic; Combined Diphtheria-Scarlet Fever Prophylactic. A. T. Glenny and H. Waddington.—p. 118.

Experimental Endocarditis.—Endocarditis has been produced by Wright by injection of pneumococci into immunized rabbits and by repeated injections of nonhemolytic streptococci into rabbits. The lesion so produced has the features of an acute process. There is evidence of marked antibody production by such animals which at the same time show a progressively increasing septicemia such as is found in subacute infective endocarditis in man. The precise conditions for the production of this condition have not been determined.

Sacrococcygeal Chordoma.—Stewart and Morin report the third case of chordoma occurring in Leeds, review the recent

literature of the subject and give an account of the fundamental and more or less constant symptomatology of sacrococcygeal chordoma from which, as in the present instance, it is often possible to make a reasonable probable diagnosis even before biopsy. They also describe a recent typical example of chordal heterotopia (ecchordosis physaliphora spheno-occipitalis).

Calcification in Basal Ganglions of Brain.—The so-called "calcification" of the arteries in the anterior half of the globus pallidus is an extremely common occurrence and is found in many diseases affecting various parts of the central nervous system. It was present in fifty of 100 brains examined by Hurst and at all age periods between 20 and 81. The deposit may occur chiefly in the media or it may primarily affect the adventitia and spread to the media later; in cases of atherosclerosis it may also occur in the intima. Often deposits are seen at the peripheral margin of the Virchow-Robin space. The process consists in the infiltration of one or more coats of the vessel with iron salts, the application of suitable tests failing to show the presence of calcium. In the majority of these cases, and in others not showing vascular deposits, degeneration bodies, frequently infiltrated with iron salts, are found in the lenticular nucleus and especially in the globus pallidus. They were present in the globus pallidus in 68 per cent of the cases; in the putamen in 30 per cent. The presence of these vascular deposits and of degeneration bodies is an expression of the proclivity of the affected regions to undergo degeneration in the second half of life, even when not directly affected by the disease to which the patient succumbs. The deposition of iron salts is to be correlated with the high iron content of these parts of the brain.

Effect of Fatigue on Infection.—Fatigue had no influence on the mortality of rats after Boycott and Price-Jones had inoculated them with Gaertner's bacillus. After feeding, Gaertner's bacillus finds its way into the spleens of both fatigued and normal rats, but fatigue much increases the illness and mortality. Repeated fatigue did not break down the natural resistance of the rat to tuberculosis.

Nature of Movements of Omentum.—Experiments made by Florey, Walker and Carleton show that the omentum is totally incapable of any intrinsic movements. The agents whereby the omentum is passively moved about in the abdominal cavity are posture, peristalsis and diaphragmatic movements. Its powers of adhesion and encapsulation are intrinsic.

Effect of Mesenteric Lymph Gland Extract on Leukocytes.—The saline extract prepared by Mole from the mesenteric lymph glands of a spleenless rabbit seems to have a specific effect in producing an increased leukocyte count in the spleenless rabbit. It has not this effect on the normal rabbit whose leukocytes tend rather to decrease after the injection.

Lancet, London

1: 215-268 (Jan. 30) 1926

Chemotherapy of Syphilis. C. Levaditi.—p. 215.
Manipulative Treatment. W. R. Bristow and R. C. Elmslie.—p. 218.
*Effect of Pasteurization on Infectivity of Milk of Tuberculous Cows. R. G. White.—p. 222.
*Pernicious Anemia of Aplastic Type; Phagocytosis of Erythrocytes. L. E. H. Whitby and R. Jackson.—p. 226.
*Biochemical Action of Intravenous Antimony Tartrate Injections. J. B. Christopherson and S. R. Gloyne.—p. 227.
Case of Amebic Dysentery Contracted in England. M. N. Russell. —p. 229.
Syringomyelia of Thirty Years' Duration. W. S. Medley.—p. 229.

Effect of Pasteurization on Tuberculous Milk.—Experiments have been carried out by White with naturally infected milk from cows with tuberculous udders, with milk contaminated with cultures of tubercle bacilli, and with milk to which ground-up caseous tuberculous glands have been added. The method employed was to raise the temperature of the milk to 62.5 C. and to keep it at this temperature for thirty minutes. The results obtained by inoculating such pasteurized milk into guinea-pigs have shown clearly that pasteurization carried out under these conditions ensures a noninfective milk so far as *B. tuberculosis* is concerned.

Pernicious Anemia of Aplastic Type.—In the case reported by Whitby and Jackson the clinical findings and blood picture were similar to those found in the aplastic type of pernicious anemia occurring among munition workers during the late war. It is a significant fact that the patient was by trade a "film varnisher"—an occupation involving the continuous use of some form of "dope"—but the authors were unable to trace any previous cases of disease among such workers or to find any evidence for the occupation being the primary cause of the disease.

Action of Antimony Tartrate Injections.—Patients subjected to a prolonged course of intravenous injections of antimony frequently exhibit signs of hypersensitivity—presumably an example of drug allergy—with nontoxic doses. It is suggested by Christopherson and Gloyne that the signs of this hypersensitivity may be due to an alteration of protein metabolism and in extreme cases may resemble true protein shock. The viscera of a man who had died from accidental error of dose of intravenous antimony showed degeneration and destruction of the parenchyma of liver and kidneys. Four rabbits succumbed to intravenous injections of antimony tartrate in doses ranging from ⅛ grain to ½ grain. The postmortem changes noted in these animals were: (*a*) dilation of blood capillaries, (*b*) effusions into serous membranes (pericardium and peritoneum), (*c*) hemorrhages into lungs and spleen, and (*d*) retention of urine. The chief histologic lesion noted in these animals was degeneration of the hepatic cells. Similar, but less constant and less marked, degenerative changes were found in the kidney tubules. An attempt was made to protect a rabbit against the toxic effects of antimony by injecting sodium thiosulphate shortly after each dose of the antimony. The animal died after receiving 4½ grains of antimony over a period of twenty-three days. One rabbit of the preceding series, died after receiving 4⅛ grains in sixteen days without attempted protection with sodium thiosulphate.

Medical Journal of Australia, Sydney

1: 29-54 (Jan. 9) 1926

Chronic Ulcer of Leg. F. Maclure.—p. 29.
Treatment of Cancer by Low Grade Heat. D. Kelly.—p. 34.
Some Experiences with Gullstrand's Slit Lamp. J. F. Spring.—p. 36.

Practitioner, London

116: 89-176 (Feb.) 1926

Some Pitfalls in Medical Diagnosis. B. Bruce-Porter.—p. 89.
Difficulty of Accurate Diagnosis. T. Myles.—p. 95.
Modern Diagnosis of Nervous Diseases. E. F. Buzzard.—p. 101.
Value of Examination of Cerebrospinal Fluid. J. G. Greenfield.—p. 108.
Direct Endoscopy of Lower Air Passages and Upper Food Tracts in Diagnosis. W. Hill.—p. 119.
Radiography of Renal Tract. R. Knox.—p. 125.
Roentgen Rays in Diagnosis. I. Diseases of Lungs and Pleura. D. Lawson.—p. 132.
Id. II. Fractures and Dislocations. J. H. D. Webster.—p. 138.
Id. III. Gastro-Intestinal Disorders. A. C. Jordon.—p. 153.
Id. IV. Dental Diseases. J. M. Redding.—p. 161.

Bulletin de l'Académie de Médecine, Paris

95: 99-117 (Feb. 2) 1926

Modes of Expression of Great Emotions. Guéniot.—p. 101.
*Vaccination Against Tetanus. C. Zoeller and G. Ramon.—p. 104.
Three Species of "Penicillium." A. and R. Sartory.—p. 114.

Anatoxin for Vaccination Against Tetanus.—Zoeller and Ramon's research was made on 100 subjects. After one subcutaneous injection of 0.5 or 1 cc. of anatoxin, the serum from the vaccinated subjects, a month later, did not immunize guinea-pigs against one lethal dose of toxin. A month after an injection of 2 cc. of anatoxin, given fifteen days later, the serum neutralized from one to ten lethal doses of toxin. Repeated injection evidently enhanced the acquired reactivity. Serum from subjects given three injections of anatoxin neutralized from 500 to 3,000 lethal doses of tetanus toxin, after eight days. In seven persons, anatoxin was injected simultaneously with 5 cc. of tetanus antiserum; the amount of antitoxin as well as the acquired reactivity appeared unchanged. Under associated injections of anatoxin and antityphoid vaccine, the acquired reactivity was enhanced, and agglutination of typhoid bacilli occurred as usual. An active immunity was thus induced simultaneously against typhoid and tetanus. Antiserum treatment still remains the

method of choice in emergency cases, since the development of active immunity is slow. The antiserum and anatoxin can be advantageously combined: the first to avert immediate manifestations of the tetanus; the second, tardy occurrence. The injections of anatoxin were not accompanied by any untoward by-effects.

Bulletins de la Société Médicale des Hôpitaux, Paris

50: 63-122 (Jan. 22) 1926

Two Cases of Dextrocardia. A. Clerc and R. Lévy.—p. 63.
Case of Infantilism. Baudouin et al.—p. 72.
*Epidemic Resembling Encephalitis. David and Dekester.—p. 75.
*Hypertension-Inducing Action of Salt. L. Ambard and R. Cahn.—p. 77.
*The Alkali Reserve. L. Ambard et al.—p. 80.
Multiple Manifestations of Syphilis. Bariéty and Kaplan.—p. 85.
Amyotrophic Paraplegia of Rheumatic Origin. Raynaud et al.—p. 90.
*Parkinsonian Tremor Associated with Rheumatism. E. May.—p. 94.
*Tonus of the Vagus in Hyperthyrosis. A. Krause.—p. 98.
*Sodium Citrate and Arterial Tension. M. Renaud.—p. 102.
*Action of Drugs on Gallbladder Contraction. M. Chiray et al.—p. 103.
*Visualization of Duodenum and Gallbladder. M. Chiray.—p. 115.

An Epidemic of a Special Form of Encephalitis.—David and Dekester describe an epidemic observed last November in a suburb of Lille. Their statistics include six children, twenty-five women and nineteen men. Five or six members of the family became ill at once, but no cases of contagion were noted in the environment. After a short incubation, the disease started with swelling of the face and eyelids, conjunctivitis and high fever. Then pain appeared in the legs, soon followed by paraplegia with abolition of the reflexes, but without disturbances of the sphincters. This was accompanied by contraction of the muscles of the spine, nuchal rigidity and Kernig's sign. The whole body became almost as stiff as a board. The oculomotor centers seemed to be intact, while there was involvement of the bulbar centers, especially of the glossopharyngeal and vagus nerves. The sensory and mental condition appeared normal. Arterial hypotension was associated with hypotension of the cerebrospinal fluid. Edema of the legs was sometimes manifest late in the disease, but there was no albumin in the urine. The morbid phenomena disappeared in from eight to fifteen days in mild cases; in grave cases death usually occurred within a few weeks. Cultures of the blood and cerebrospinal fluid were negative; the affection may have been induced by a neurotropic virus, possibly analogous to that in encephalitis. The special features of this encephalitis may be explained by localization of the virus in the spinal cord and medulla oblongata instead of in the mesencephalon. Cases of low encephalitis, of polyneuritic type, have been reported before (Beriel and Devic).

Hypertension-Inducing Action of Salt.—Ambard and Cahn report the case of a man with hypertension who developed acute edema of the lungs, for which salt in the food appeared to be responsible. The hypertension was accompanied by albuminuria, uremia and dry chloride retention; there was no dropsy. On a salt-free diet the arterial tension declined, but it increased rapidly by 4 cm. of mercury when the restriction of salt was suspended. Evidently the rise in the blood pressure did not depend on the edema, but probably on the concentration of chlorine in the tissues.

Variations of the Alkali Reserve.—Ambard, Schmid and Adnot's conclusions are based on five observations. A manifest connection seems to exist between the content of sodium chloride in the food and the alkali reserve. The latter increases under restriction of salt, and decreases with its intake. The phenomenon is manifest in healthy persons; still more in those with different kidney diseases. No correlation seems to exist between the alkali reserve and the chlorine of the plasma. It is possible that an excessive concentration of chlorine in the respiration centers modifies the ventilation of the lungs, indirectly reducing the alkali reserve. Thus may be explained why there is no close relation between the uremia and the alkali reserve in nephritis, since there is no close relation between uremia and chlorine retention.

Parkinsonian Tremor on One Side, Arthritis on the Other.—May reports two cases of a parkinsonian syndrome in men, aged 60. The tremor was limited to the left arm, with acute arthritis of the right hand with contracture. Both affections appeared simultaneously, soon after herpes zoster. This seems to demonstrate that an infection of the nervous system may be the common origin of both. The presence of diplopia in one case, and of attacks of somnolency in the other suggest that a masked epidemic encephalitis may have been the causal factor. Tentative treatment as for syphilis proved futile. The condition has persisted for eighteen months to date in one case; a delusion of persecution developed the fourth month in the other patient, compelling institutional restraint.

Tonus of the Vegetative System in Hyperthyrosis.—Krause studied the vagosympathetic tonus of 100 patients. He gives here the results in two with exophthalmic goiter, two with hyperthyroidism and five with pulmonary tuberculosis of pseudothyroid type. Exaggerated tonus of the sympathetic and vagus was noted only in one; predominantly of the sympathetic in eight, while the tonus of the vagus remained normal or even decreased.

Rise of Arterial Tension from Sodium Citrate.—Renaud relates that large doses of sodium citrate, from 8 to 12 Gm., were given to twelve patients with arteriosclerosis. This induced gradual increase of both the systolic and diastolic arterial tension. No functional disturbances of any kind were observed. As soon as the intake of the citrate was suspended, the tension became normal within two or three days. Sodium citrate may exert a direct action on the center controlling the tension. The blood pressure should be carefully examined in cases of prolonged administration of the drug.

Action of Certain Substances on Contraction of the Gallbladder.—In some of the cases described, the use of the duodenal tube and injection of magnesium sulphate had been preceded by subcutaneous injection of pilocarpine. The drug appeared to enhance the stimulating action of the magnesium sulphate on the secretion of bile. Chiray, Lebon and Callegari's further experiments confirmed that pituitary extract induces contraction of the gallbladder. The contraction was rapid, durable and strong, even in the cases in which direct stimulation of the gallbladder had been of no avail. Probably, the influence of the drugs on gallbladder contraction is due to their action on the vagus. Thus the use of these drugs may be indicated in stasis of the gallbladder from atony, a condition which is at least as frequent as mechanical stasis from pericholecystitis, stenosis or gallstones. It is thus possible by general medication to induce a kind of physical training of the gallbladder. Two patients treated on this basis were materially improved, overcoming the stasis of the gallbladder. The pituitary extract test may reveal the real condition of the gallbladder, and therefore indicate whether a cholecystectomy is necessary or not.

Visualization of the Duodenum and Gallbladder by Oral Technic.—Chiray gives the phenoltetraiodophthalein in pills, and states that in sixteen of his twenty-one cases the roentgenograms were as distinct as when it was given by the vein.

Médecine, Paris

7: 165-240 (Dec.) 1925

Hygiene and Infectious Diseases in 1925. L. Tanon.—p. 165.
Kala-Azar in Mediterranean Basin. H. Soulié.—p. 183.
Rôle of Mammalia in Conservation of Viruses. Neveu-Lemaire.—p. 189.
Carbon Monoxide and Food Poisoning. Kohn-Abrest.—p. 192.
The Three-Day Sandfly Fever. Trabaud.—p. 198.
Paramelitensis Fever. L. Nègre.—p. 203.
Ultraviolet Rays in Treatment of Rickets. L. Tixier.—p. 208.
Failures of Meningococcus Antiserum. Cambessédès and Luton.—p. 215.
Bacteriologic Examination of Water. R. Neveu.—p. 221.
*Significance of Eosinophilia. Schmite.—p. 227.
Grave Rectocolitis. E. Antoine. Supplement.—p. 1-48.

Diagnostic Value of Eosinophilia.—Schmite specifies three groups of diseases in which an excess of eosinophils in the blood may aid in diagnosis. In diseases of parasitic origin, especially hydatid cyst and chronic amebiasis, the clinical signs may remain uncertain and the parasite escape detection; eosinophilia may be the only element to suggest the diagnosis. Marked eosinophilia with digestive disturbances may reveal the presence of intestinal worms. It is most pronounced with the hookworm, and is inconstant in leishmaniasis and trypanosomiasis. An increased number of eosinophils is observed in certain blood diseases, especially leukemias. It is important in the myeloid form and is rare in the lymphoid.

In the febrile stage of Hodgkin's disease, an excess of eosinophils in the blood coexists with that in the tissues. Eosinophilia is frequent in skin diseases of erythema or pemphigus type; it is constant in herpetiform dermatitis. A fourth group is represented by cases of intense eosinophilia in which the number of eosinophils surpasses 65 per cent, and the number of leukocytes is normal or increased. The pathogenesis of this eosinophilia is still unknown. Reappearance of eosinophils in the blood indicates a tendency to recovery. According to Markowich and Gueratovitch, eosinophilia is excessive in the mild form of scarlet fever, absent in the grave form. Disappearance of eosinophils in amebiasis and hydatid cyst testifies to a complicating abscess. Differentiation of essential asthma from pseudo-asthma, in heart or kidney disease, may be based on the absence of eosinophilia in the latter. Eosinophilia does not accompany all anaphylactic conditions; it is inconstant in migraine and exceptional in urticaria.

Nourrisson, Paris

14: 1-64 (Jan.) 1926

The Infant Asylum at Montevideo. L. Morquio.—p. 1.
Early Treatment of Congenital Syphilis. H. Lemaire.—p. 18.
*Treatment of Cracked Nipples. P. Chatin.—p. 36.
*Diarrhea in Breast-Fed Infants. L. Bytsch.—p. 40.
Vaccine Dressings for Pyodermatitis in Infants. E. Odier and S. Dreyfus.—p. 44.

Ultraviolet Rays in Treatment of Fissured Nipples.—Chatin applied ultraviolet rays in twelve cases of cracked or fissured nipples. The treatment was given on alternate days. The first exposure was for two minutes, gradually increasing by two minutes up to ten. Pain was sometimes relieved by the first exposure; healing was rapid, and a complete cure occurred within one or two weeks.

Treatment of Primary Diarrhea in Breast-Fed Infants.—Bytsch refers to cases of diarrhea in breast-fed infants, occurring in the first days of life. According to Marfan, the diarrhea may be due to hypersensitization of the intestine to the maternal milk. The affection is not grave, never inducing marasmus. The treatment consisted in the following: Toasted slices of wheat bread were ground and sifted. Two teaspoonfuls of this powder were boiled in 100 Gm. of weak tea, and sweetened with a little sugar or saccharin. Two teaspoonfuls of this gruel were given before each feeding, four or five times a day. Improvement was noted in two or three days. By the second to the fourth day there were no more than three or four stools daily. The infants regained appetite and gained in weight. This method of feeding was sometimes continued until the infant was 3 months old. The breast feeding had never been interrupted.

Presse Médicale, Paris

34: 161-176 (Feb. 6) 1926

*Cholesterol and Uric Acid in Gout. Cluzet et al.—p. 161.
*Case of Periarterial Sympathectomy. J. M. Vilardell.—p. 162.
Discussion on Rheumatism at British Conference. R. Clément.—p. 162.

Cholesterol and Uric Acid in Gout Under Thorium Treatment.—Cluzet, Piéry, Chevallier and Dubost treated successfully a patient with a grave form of articular gout and anemia by inhalations of thorium emanations. Two roentgenograms are given showing the favorable changes in the joints. While the daily elimination of uric acid before the treatment was 0.5 or 0.6 Gm., under the first month of treatment with thorium it reached 1.75 Gm. With a daily intake of 4 liters of fluids, the parallel course of the diuresis and uric acid elimination was evident. Reduction of the liquid intake by 2.5 liters was followed by a severe attack and increase of uric acid in the blood. The content of cholesterol per liter of blood rose from 0.5 to 2 Gm. after the thorium inhalations. The concentration of cholesterol in the blood may be due to the stimulating action of the thorium on tissue activity.

Periarterial Sympathectomy.—Vilardell reports recovery after periarterial sympathectomy in a case of accidental severing of the ulnar nerve. Suture of the nerve had not checked the gangrenous process, with sloughing off of the little finger in two weeks. The ulcer of the stump did not yield to electrotherapy or other methods used for eight months. Removal of the adventitia of the middle third of the brachial artery induced complete healing in twenty-one days. The cure has persisted for two and a half years to date.

34: 177-192 (Feb. 10) 1926

*Pathogenesis of Biliary Colic. M. Chiray and I. Pavel.—p. 177.
Bacteriology and Physical Chemistry. Dujarric de la Rivière.—p. 179.
*Intracardiac Injection of Epinephrine. Garipuy and P. Mériel.—p. 180.
Glucose in Treatment of Gonorrhea. G. Ichok.—p. 181.
Galen's Organotherapy in Psychiatry. R. Van der Elst.—p. 187.

Pathogenesis of Biliary Colic.—Chiray and Pavel assert that a migrating gallstone, foreign body or inflammation of the gallbladder does not induce a biliary colic; they only favor its appearance. Spasmodic contraction of the gallbladder, from excessive stimulation of the vegetative system, is the determining factor of the colic. Among the arguments to sustain this conception of the cause of the paroxysm of pain are the sudden occurrence and disappearance of certain colics under the mere influence of an emotion as, for instance, grief, in the absence of a gallstone or foreign body. Then, the short duration of certain paroxysms, persisting less than an hour, sometimes only a few minutes. An important argument, they say, is also the experimental contraction of the gallbladder with a subsequent painful paroxysm, from injection of magnesium sulphate into the duodenum.

Resuscitation of the New-Born by Intracardiac Injection of Epinephrine.—After the usual attempts to restore respiration had failed, Garipuy and Mériel injected into the heart 1 cc. of 1:1,000 solution of epinephrine in a newly born infant with white asphyxia. Heart beats reappeared as soon as the injection was finished. Artificial respiration and traction of the tongue were continued for fifteen minutes longer, when normal respiration was established permanently. They emphasize that the intracardiac injection should be used by obstetricians as a routine procedure at need, since the method is easy, rapid and highly effectual.

Schweizerische medizinische Wochenschrift, Basel

56: 97-120 (Feb. 6) 1926

*The Principles of Therapy. M. Hausmann.—p. 97.
The Principles of Orthopedics. R. Scherb.—p. 102.
Hypertrophy of the Breasts. A. Wolowelsky.—p. 104.
Cancer Statistics. A. Renaud.—p. 106. C'td.
*The Blood After Roentgen Rays and Tuberculosis. A. Epstein.—p. 111.

The Principles of Therapy.—Hausmann would like to see less use of statistical methods and of fatalistic theories as to heredity in the standpoint of the practitioner. They are valuable only for the present and the past aspect of the disease. The mortality from puerperal fever used to be 10-20 per cent, until Semmelweis saw that this was not necessary. One dies inevitably from a certain disease, until the day comes when one does not have to die from it. The actual happenings differ from the possibilities, and because of the complexity of conditions no single law of nature has a fatalistic power. Medical science warns against what Bleuler calls autistic thinking; medical art requires it to a certain extent.

The Blood After Roentgen Rays and Tuberculosis.—Epstein found that irradiation of a guinea-pig with 1,000 R. units suppressed for twenty days the increase in neutrophils, and later also in lymphocytes, which would otherwise follow an intraperitoneal infection with tubercle bacilli. A dose of 100 R. units enhanced it. No difference in the course of the tuberculosis was noted between such animals and those that had not been irradiated.

Arq. Ind.-Portugu. Med. e Hist. Nat., Nova-Goa

2: 1-202, 1925. Partial Index

Bronchial Spirochetosis. Froilano de Mello.—p. 1.
Intestinal Spirochetosis. B. Pereira Mesquila.—p. 23.
*Alleged Antidotes for Snake Venoms. J. M. Raimundo.—p. 125.

Native Indian Alleged Antidotes for Snake Venoms.—Raimundo has made an exhaustive study of different herbs claimed by the natives to be able to cure snake bites. He experimented with the venom of *Naja tripudians*, after determining the lethal dose for animals. Thirteen plants and herbs were tested and only one displayed any curative action. This was a ginger plant, *Zingiber cosmunar*, and guinea-pigs

survived the lethal dose of the snake venom after administration by mouth of 1.5 Gm. of the rhizome in 5 Gm. of water, or death was delayed for several hours.

Brazil-Medico, Rio de Janeiro

2: 311-324 (Nov. 28) 1925

*Hernia as an Industrial Accident. L. Ribeiro.—p. 311.
*The Verumontanum from the Clinical Standpoint. A. Valerio.—p. 313.
*Avoidable Keratitis. E. Campos.—p. 319.

Hernia and Industrial Accidents.—Recent legislation in Brazil on workmen's compensation has raised the question confronting other countries, namely, when can a hernia be regarded as an industrial accident? The Brazilian law requires for accepting this that the accident must be the sole and single cause of the hernia. But the courts have interpreted the law otherwise. In other countries it is the general opinion that of 1,000 cases of hernia, an industrial accident might be incriminated for it in only two or three instances. Ribeiro's experience with sixty-five cases testifies to the same approximate proportion. It is only exceptionally that a hernia can be ascribed to physical injury as it is almost always of slow development, in persons congenitally predisposed to it. The traumatism does not represent the principal cause but merely aggravates the preexisting lesion of which the bearer may not have been aware. Systematic physical examination of all workmen, as is done in military circles, would solve the problem.

Disease of the Verumontanum.—Valerio found evidences of inflammation in seventeen of twenty-six cases and a cyst, polyp or papilloma in the nine others, explaining the disturbances, which had been variously ascribed to the prostate, seminal vesicles or urethra proper. Every one was permanently cured by local treatment, either application of a caustic or the galvanocautery. Posterior urethroscopy is indispensable in all chronic disturbances in this region.

Avoidable Keratitis.—Campos expatiates on the necessity for protecting the cornea when the eyelids gape during long periods of unconsciousness or long sickness. His text is an infant with ulceration of both corneas, exactly corresponding to the ellipse left by the gaping eyelids during the semicomatose phase of prolonged toxicosis. The keratitis might have been prevented by closing the eyelids with a couple of strips of adhesive during the prostration. Infants are especially liable to need this.

Revista Médica del Uruguay, Montevideo

28: 223-248, 1925

*Cardiac Epilepsy. M. P. Abascal and J. M. Cerviño.—p. 223.
*Prolonged Fever of Syphilitic Origin. E. Figari Legrand.—p. 239.

Cardiac Epilepsy.—Abascal and Cerviño apply this term to designate a tendency to epileptic seizures when the circulation in the brain is hampered from pathologic conditions in the heart. A case is described in which the circulatory disturbances seemed to be the sole cause of the epilepsy. In the last few years the man had been having attacks of severe pain in the lumbar region and back of the neck, ascribed to rheumatism. Later, palpitations and dyspnea on exertion incapacitated him almost completely. When a child, he had been kicked in the precordial region by a horse, and the wall of the chest was deformed, the heart much dilated. There were no motor disturbances, but acute edema of the lungs often followed the unconsciousness of the seizure. Under treatment addressed to the heart, the dyspnea subsided. In a second, similar case, there was congenital absence of the right pectoralis muscle. In both the minor manifestations of epilepsy had preceded the manifest heart disease. In the first patient they first appeared after an attack of typhoid.

Protracted Fever of Probably Syphilitic Origin.—A young woman with no appreciable signs or symptoms of congenital syphilis had persistent fever after an attack of what seemed to be influenza. The fever continued for ten weeks, rebellious to all measures, including shock treatment, organotherapy and heliotherapy. The late date of puberty in the patient and one sister was the only feature of the case suggestive of syphilis, but under tentative mercurial treatment the fever was promptly arrested and the general health showed marked improvement. The parents were first cousins.

Revista Médica Veracruzana, Vera Cruz

5: 133-150, 1925. Partial Index

Revindication of Humanized Vaccine. M. S. Yglesias.—p. 133.
*Rupture of the Perineal Urethra. N. L. Melo.—p. 142.

Rupture of the Perineal Urethra.—In the first of the two cases described by Melo, the healthy young man had fallen astride an iron bar and the hematoma that formed was evacuated the third hour after the accident. The posterior stump of the bladder could not be located until after injection of methylene blue. The lesions promptly healed after passage of a grooved sound into the bladder, with a retention catheter. In the other case five days had elapsed after the bullet wound before the patient reached the hospital, and infection was already installed, compelling diversion of the urine. Both patients made a smooth recovery and the urethra of the first patient was normally permeable over three years later.

Revista de la Soc. Arg. de Urol., Buenos Aires

1: 165-188 (Oct.) 1925

*Extraction of Hairpin in Bladder. L. E. Pagliere.—p. 165.
*Roffo Serologic Test for Cancer. A. Astraldi and Rivarola.—p. 169.
Diverticulum of Bladder Treated Surgically. Maraini and Quintana.—p. 176.
Complete Retention with Large Adenoma in the Prostate. B. Maraini and J. N. Dante.—p. 179.

Harmless Extraction of a Hairpin in the Bladder.—Two days after the hairpin had slipped into the bladder, the last of the urine was slightly blood stained, and micturition was frequent. Pagliere gives an illustration of the device with which he then easily extracted the foreign body. After cutting off the tip of a no. 14 catheter, he passed through it a copper wire, bending the tip to form a round hook. The wire was then drawn back until the hook fitted over the tip of the catheter. It was then passed into the cystoscope and introduced into the bladder.

The Importance for Urology of the Roffo Neutral Red Serologic Test.—Astraldi and Rivarola state that the response was constantly positive in their six cases of cancer of the prostate tested, and in the three cases of cancer of the bladder with histologic confirmation. In three of six cases with cystoscopic findings suggesting cancer of the bladder, but not confirmed otherwise, the response was positive in three and negative in three. It was also constantly negative in four cases of adenoma of the prostate and in two of polycystic kidney. As already mentioned in these columns, Roffo adds to 2 cc. of fresh, centrifugalized serum 5 drops of a 5 per cent solution of neutral red. The yellow tint persists with normal serum, but it veers to red with cancer serum.

Revista de la Soc. de Med. Interna, Buenos Aires

1: 501-558 (Oct.) 1925

*Tabetic Vomiting Crises. P. Escudero and J. W. Tobías.—p. 501.
*Cholesteremia and Calcemia in Thyroid Disease. M. R. Castex and M. Schteingart.—p. 514.
Roentgenography of Tumors of the Head of the Pancreas. P. Escudero et al.—p. 526.
*Stomach Function Test. A. Bergman.—p. 534.
*Cholesterol in Treatment of Anemia. Escudero and Puchulu.—p. 545.
Intravenous Medication. G. Aráoz Alfaro and L. Ymaz.—p. 553.

1: 559-592 (Nov.) 1925

Hypertension with Suprarenal Tuberculosis. Castex et al.—p. 560.
Roentgenographic Study of Liver-Bronchus Fistula. Escudero et al.—p. 563.
Basal Metabolism in Exophthalmic Goiter. Castex and Schteingart.—p. 567.
Chronic Diarrhea After Resection of Ulcer of Lesser Curvature. P. Escudero and J. W. Tobías.—p. 574.
Case of Hydatid Cyst of the Kidney. J. A. Etchepareborda.—p. 582.

Tabetic Vomiting Crises.—In the three cases described by Escudero and Tobías, the attacks of vomiting were the only gastric symptoms of the tabes. In one they were preceded sometimes by pains in the spine and lumbar region, and two presented marked asthenia. The clinical manifestations soon confirmed the tabetic origin. Bismuth relieved the attacks of vomiting. In the intervals, the stomach seemed sound, and there were no gastric pains at any time. Tobías has obtained favorable results with radiotherapy in ordinary gastric crises in certain cases.

No Relation Between the Cholesterol and Calcium Content of the Blood in Relation to Thyroid Function or to the Basal Metabolism.—Summarized recently when published elsewhere.

Stomach Function Test.—Bergman gives a test meal of gruel (two tablespoonfuls of oatmeal in 1 liter of water, boiled slowly down to 500 cc.) and immediately afterward injects 5 cc. of a 1 per cent aqueous solution of neutral red into the buttocks. Stomach content is aspirated every fifteen minutes thereafter as long as any is obtainable, continuing the examinations for three hours at least. In his seventy tests of the kind, the neutral red did not pass into the stomach content when the mucosa was gravely diseased.

Cholesterol in Treatment of Anemia.—Escudero and Puchulu relate that a woman with tuberculosis of six years' standing and grave anemia was treated with cholesterol, and gained 11 Kg. and the blood picture returned to practically normal. The leukopenia persisted, testifying to pathologic conditions in the spleen. They state that the erythrocytes had increased from 1,660,000 to 6,000,000 and the hemoglobin from 22 to 80 per cent by the fiftieth injection of 0.2 Gm. of cholesterol, in 5 cc. of olive oil, in ten weeks. The rapid improvement under the cholesterol alone confirmed the favorable reports of others in this line. They review the literature on the action of cholesterol in experimental and clinical experiences.

Deutsche medizinische Wochenschrift, Berlin

52: 179-220 (Jan. 29) 1926

*So-Called Traumatic Neuroses. I. K. Bonhoeffer.—p. 179.
*Idem. II. W. His.—p. 182.
*Sanocrysin. F. Klemperer.—p. 186.
Necrotizing Brain Syphilis. H. Herschmann.—p. 192.
Treatment of Pyodermias. K. Zieler.—p. 193.
Organotherapy in Dermatology. E. Pulay.—p. 195.
Bases for Ointments. P. Unna, Jr.—p. 197.
Treatment of Chilblains. H. Hübner.—p. 200.
Syphilis Infection of Wife. H. Hübner.—p. 200.
Vital Statistics in Prussia. Solbrig.—p. 201.
Expert Testimony in Insurance Cases. P. Horn.—p. 202.
Dentists and Dental Technicians. Walkhoff.—p. 203.
Unification of School Physicians' Records. A. Braun.—p. 204.
The Colitis Question. O. David.—p. 217.

So-Called Traumatic Neuroses.—Bonhoeffer regrets that the practical consequences have not kept pace with the development of scientific knowledge on the so-called traumatic neuroses. The symptoms following real concussion of the brain resemble Korsakoff's syndrome, or they consist of a more or less pronounced amnesia, or convulsions, or disturbances of tolerance for alcohol and periodic depressive states. They can be easily distinguished from the purely functional troubles. Fright may produce a vasomotor complex, but only for a short period, unless there is the wish to draw advantages from it. Traumatic hysteria is not a disease, but only a psychologic reaction which occurs only with certain wishes and disappears if they are given up. The complaisant or ignorant physician injures not only the state or the insurance company, but also the victim of the trauma, who keeps his symptoms as long as he can hope for compensation. Hospitals for soldiers with traumatic neuroses were required for their own soldiers, never for the millions of prisoners of war who knew that they were out of danger. He agrees with Hauptmann's opinion that no compensation should be allowed in "compensation hysteria." His points out that experience on the causal relation between liability legislation and traumatic hysteria is old, as well as the knowledge that such subjects recover after getting an indemnity. As long ago as 1894, Ricolins spoke of "gold treatment which can be made with bank notes." The diagnosis is quite safe, only injuries of the head require special attention. As long as the law grants an indemnity, a single payment is preferable to doling out the sum, which only prolongs the symptoms. He is against any compensation where the wish factor is predominant. In mixed cases he agrees with the findings of the Swiss conference to the effect that if the symptoms are such that they would not occur in a noninsured person, the claim should be rejected.

Sanocrysin.—Klemperer has treated forty-two patients suffering from pulmonary tuberculosis with sanocrysin for a whole year. He concludes that the antiserum only aggravates the sanocrysin poisoning. Doses of 0.5 and 1 Gm. to begin with are harmful. Doses of 0.1 and 0.25 Gm., slowly increasing to 0.5-1, are not injurious. The treatment is useful in some cases, useless in an equal number of others, but it is impossible to predict which action will occur. A debate on this paper is also reported.

Klinische Wochenschrift, Berlin

5: 89-128 (Jan. 15) 1926

Histopathologic Research on Nervous System. W. Spielmeyer.—p. 89.
*Water Metabolism. H. Marx.—p. 92.
*Avitaminosis and Fractures. A. Israel and R. Fränkel.—p. 94.
*Roentgen Rays and Micro-Organisms. E. Schneider.—p. 97.
Cancer Metastases in Skin. K. Dürbeck.—p. 99.
Protein Therapy of Peptic Ulcer. F. Rothschild.—p. 102.
*Reaction of Infusion Fluid. G. Endres.—p. 104.
*Nuclei of Leukocytes in Syphilis. R. Lemke and W. Streblow.—p. 106.
Kahn's Cancer Test. P. Skwirsky and V. Striedter.—p. 109.
"Specific Dynamic Action." H. Pollitzer.—p. 109.
"Ovarian Hormone." M. Kochmann.—p. 110.
*Blood Volume with Splenomegaly. E. Greppi.—p. 110.
Variability of Corynebacteria. M. Gundel.—p. 111.
Genital and Peritoneal Tuberculosis. W. Benthin.—p. 111.
Bill on Illegitimate Children. Nippe.—p. 116.

Water Metabolism.—Marx gave the suggestion of drinking to hypnotized subjects. They reacted by polyuria with a low specific gravity of the urine, and dilution of the blood, followed by inspissation. These experiments throw light on the theory of polyuria and polydypsia and their psychic origin.

Avitaminosis and Healing of Fractures.—Israel and Fränkel found that fractures in guinea-pigs do not heal if the animals are kept on a diet free from vitamin C. A mere restriction of the vitamin, which is sufficient to retard the growth of the animal, does not impair the formation of callus. They observed a fracture of the callus in one animal put on the vitamin free diet after the healing had become evident. The incentive to this work was given by Bier who found analogous observations on the reopening of ulcers and fractures in sailors, quoted in Sir Astley Cooper's lectures, which are 100 years old.

Roentgen Rays and Micro-Organisms.—Schneider irradiated yeast with roentgen rays. The yeast lost about 10 per cent of its fermentative activity if irradiated during fermentation and in the presence of electrolytes. Otherwise he confirmed the resistance of unicellular organisms to the roentgen rays. Even photosensitization with eosin made no difference in yeast. He explains the resistance of micro-organisms by their relative independence from the medium, which is the main point of action of the roentgen rays.

Reaction of Infusion Fluid.—Endres confirms the increased acidity of the blood after hemorrhage. In spite of this, an alkaline injection fluid is contraindicated because it would inhibit the dissociation of oxyhemoglobin. The increased acidity promotes this after the hemorrhage in a similar way as in high altitudes. The ideal injection fluid would be slightly acid, he thinks.

Nuclei of Leukocytes in Syphilis.—Lemke and Streblow confirm the presence of changes of the nuclei of leukocytes and lymphocytes described by Antoni in syphilis. In an arrangement excluding completely self-suggestion, they made a correct diagnosis in 90 per cent of the cases. Other diseases —especially anemia—may give pictures which resemble the typical ones, but a coincidence of weak staining of nuclei, irregular outlines, and formation of Antoni's canals is practically pathognomonic of syphilis.

Blood Volume with Splenomegaly.—Greppi found with the congo red method very high figures for the blood volume in three cases of leukemia, and only a little less in three cases of splenomegaly of other origin. He believes that the method is unreliable in such conditions probably because of a rapid absorption of the dye by the spleen.

Medizinische Klinik, Berlin

22: 159-198 (Jan. 29) 1926

*Syphilis and Interruption of Pregnancy. A. Buschke and M. Gumpert.—p. 159.
Psychotherapy in Urology. J. J. Stutzin.—p. 163.
Large Blood Transfusions. A. Plehn.—p. 166.

Protein Restriction in Diabetes. L. R. Grote.—p. 167.
Deodorization of Cancer. L. Freund.—p. 170.
Tumors of Brain and Cord. H. Alfes and K. Eggert.—p. 171.
Disease of Temporal Bone. Charousek.—p. 174. C'cn.
Tuberculosis and Accident Insurance. E. Suess.—p. 176. C'cn.
Lipase in Tuberculosis. F. Rosowsky.—p. 178.
Liver Atrophy and Trauma. W. Stoeckenius.—p. 179.
Electrophysical Treatment. B. Berliner et al.—p. 182.
American Research on Scarlet Fever. F. Szirmai.—p. 183.
*Moral Aspects of Abortion and Birth Control. K. Vogtherr.—p. 195.
The Lymphatic Organs. L. Aschoff. Supplement.—pp. 1-22.

Syphilis and Interruption of Pregnancy.—Buschke and Gumpert have collected statistics on the grave outlook for children with congenital syphilis. They recommend consideration of abortion if the life of the mother is in danger, or if regular and intensive treatment of the syphilis during pregnancy is impossible, or if there are cases of neurosyphilis in the family, and if its financial distress is great.

Moral Aspects of Abortion and Birth Control.—Vogtherr analyzes the moral point of view in respect to birth control and interruption of the pregnancy in the first months. He sees only two possible consistent attitudes: the one which condemns morally both birth control and abortion, except in serious danger for the mother; and the other which approves of both methods of "rationalization of human procreation." A physician who refuses indignantly (instead of by simply referring to the law) to perform an abortion, but who does not hesitate to give his advice on how to prevent conception, is not a logical thinker, or else he is a hypocrite.

Wiener klinische Wochenschrift, Vienna

39: 121-148 (Jan. 28) 1926

Tumors of the Spinal Cord. K. Grosz.—p. 121. C'td.
Inflammation and Diseases. A. Theilhaber.—p. 125.
Female Axillary Organ. J. Klaar.—p. 127.
*Gwathmey's Analgesia. J. Schiffmann and W. Seyfert.—p. 131.
*Lipiodol Injury in Tuberculosis. O. Lichtwitz.—p. 133.
The First Ether Anesthesia. M. Hirsch.—p. 134.
Lamp for Inspection of the Vagina. P. Beck.—p. 135.
Serology and Treatment of Syphilis. G. Scherber.—p. 135.
Diagnosis and Treatment of Syphilis. Ullmann. Supplement.—pp. 1-20.

Gwathmey's Obstetric Analgesia.—Schiffmann and Seyfert had excellent results with Gwathmey's analgesia. They believe that the method is capable of further development. It must not be started too early.

Lipiodol Injury in Tuberculosis.—Lichtwitz made an intratracheal injection of 4 cc. of lipiodol for the purpose of bronchography in a tuberculous young woman. The temperature rose on the same evening and the tuberculosis became rapidly progressive.

Zentralblatt für Chirurgie, Leipzig

53: 257-320 (Jan. 30) 1926

*Subperiosteal Fractures. E. Müller.—p. 258.
*Parathyroid Tumor with Fibrous Osteitis. F. Mandl.—p. 260.
Vaso-Orchidostomy. J. J. Stutzin.—p. 264.
Pseudorecurrences After Cholecystectomy. H. Rummel.—p. 266.
*Perforation of Syphilitic Ulcers of the Intestine. Wahlberg.—p. 274.
Dehiscence After Laparotomy. M. Weber.—p. 277.
Mutilation of the Penis. J. Steinberg.—p. 279.
Treatment of Coxitis. B. Chatzkelsohn.—p. 280.

Subperiosteal Fractures.—Müller has observed fourteen cases of subperiosteal fracture—mostly in adolescents—which were irreducible except by surgical intervention. The abnormal motility was present, but not the crepitation. The periosteum camouflages the gravity of the dislocation of the fragments.

Parathyroid Tumor with Fibrous Osteitis.—Mandl's patient was suffering from a grave fibrous osteitis—especially of the legs. Large amounts of lime were eliminated by the urine. Mandl decided to look for the possibility of a parathyroid tumor, and found it. The patient improved considerably after extirpation of the tumor.

Perforation of Syphilitic Ulcers in the Intestine.—Wahlberg's patient died from peritonitis following multiple perforation of syphilitic ulcers of the small intestine. The history (four healthy children) and the serum test had given no diagnostic hints.

Zentralblatt für Gynäkologie, Leipzig

50: 257-320 (Jan. 30) 1926

*Nodes and Cysts on Tube. J. Schiffmann and H. Steiner.—p. 258.
Symphyseoventrifixation of the Uterus. E. Solms.—p. 263.
Gynecologic Psychotherapy. B. Liegner.—p. 274.
*Colostrum Secretion and Gynecologic Diseases. L. Ballin.—p. 278.
*Local Autohemotherapy of Mastitis. V. Rubeška.—p. 284.
Polymastia and Polythelia. L. Theodor.—p. 286.
"An Ovarian Hormone." S. Loewe.—p. 289.
*Epinephrine and Pregnancy Vagotonia. B. Varó.—p. 291.
Serum Proteins After Operations. K. Burger.—p. 294.

Nodes and Cysts on Tubes.—Schiffmann and Steiner conclude that the small nodes and cysts localized on the fallopian tubes are only normal formations, due perhaps to a local peculiarity of the peritoneum.

Colostrum Secretion and Gynecologic Disease.—Ballin does not consider colostrum as a sign of pregnancy up to the fifth month. Women who have been pregnant, and especially those who have nursed for a long period, may have colostrum for years. Ovarian changes, especially cancer, and the menopause may cause secretion of colostrum.

Local Autohemotherapy of Mastitis.—Rubeška prefers to inject 40-60 cc. of the patient's blood into the thigh. The injection has to be made early, and be repeated the next day if the temperature is not normal.

Epinephrine and Pregnancy.—Váró observed no increase of the agglutination titer against typhoid bacilli after injection of epinephrine in nine pregnant women. He confirms the increase observed by Borchardt in normal subjects, but it was absent in nonpregnant vagotonic women.

Journal Exp. Biologii i Mediziny, Moscow

1: 1-152, 1925. Partial Index

*Mechanism of Immunity in Tuberculosis. V. Lubarsky et al.—p. 3.
Phenomena of Isohemagglutination. Skadovsky and Schräder.—p. 25.
*Mental Abilities of Rats. Sadovnikova-Koltzova.—p. 40.
*Peroxidase Function of Oxyhemoglobin. Bakh and Kultiugin.—p. 60.
Antigen Property of Hemoglobin. V. Engelhardt.—p. 83.
*Experimental Avitaminosis. L. Tcherkes.—p. 97.
Protein Waste Taken Up by Erythrocytes. B. Zbarsky.—p. 121.

Mechanism of Immunity in Tuberculosis.—Lubarsky and his co-workers inoculated rats, mice and guinea-pigs with tubercle bacilli. No bacteriolysis or lipolysis was observed in the organism thus immunized against tuberculosis. The immunity seemed to be of a cellular character. Fixation of tubercle bacilli occurs as a process to render them harmless, isolating them in the immunized organism, and thus producing the tubercle. Tubercle bacilli are eliminated by way of the bile and intestine. The mechanism of the immunity realized seemed to be the same with virulent, and slightly virulent bacilli and with acid-resisting saprophytes.

Mental Abilities of Rats.—Sadovnikova-Koltzova's tests were made on 123 rats. No difference was noted between the mental ability of the males and females, but there was a manifest correlation between the mental equipment of the parents and their offspring; and also between animals of the same litter. The teaching of parents did not influence the abilities of the offspring. In the mental ability of the rats a group of three genes seemed to be involved, a gene of general activity, a gene of fear, and one of a seeking instinct.

Peroxidase Function of Oxyhemoglobin.—Bakh and Kultiugin consider oxyhemoglobin a peroxidase ferment. It is a biological catalyzer, produced by the living cell. Its ferment nature cannot be denied on account of its resistance to heat. Bakh obtained a perfect peroxidase from horseradish by ultrafiltration, still active after prolonged heating. The catalyzer property in oxyhemoglobin seemed to resist the action of acids better than in vegetable peroxidase. The data presented demonstrate that there is no evidence against accepting oxyhemoglobin as a peroxidatic enzyme.

Experimental Avitaminosis in Pigeons.—Tcherkes induced symptoms of vitamin B deficiency in pigeons deprived entirely of vitamins. An increased intake of fat did not influence the avitaminosis B on an exclusive fat diet, but the avitaminosis B process became accelerated in the presence of protein and carbohydrates. The lack of vitamin B induced first disturbances of carbohydrate and protein metabolism; then of fat metabolism.